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SAMSUNG MANAGEMENT

What Are Keys for Successful Samsung Management Succession?

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BOK Fixed Base Rate Giving Up Optimistic View on Econom

INDUSTRY & COMPANY

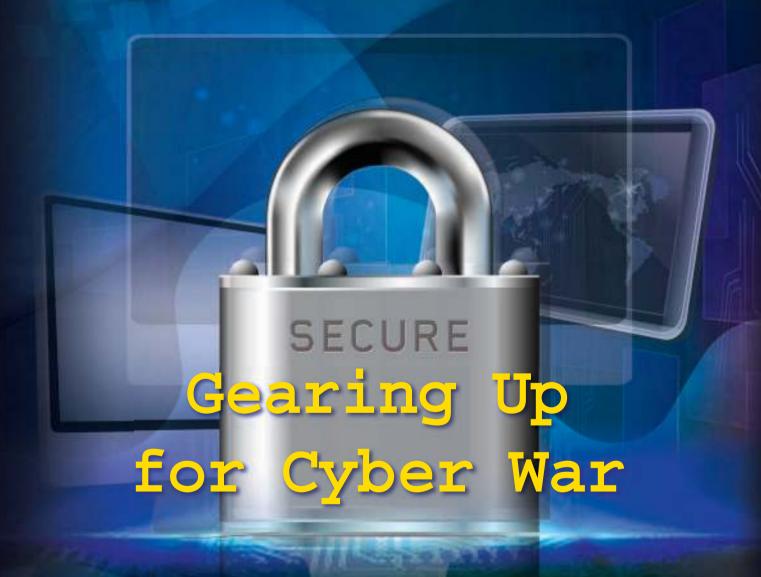
INTERNET REGULATIONS

Local Internet Firms Leaving Korea, Shaking Its IT Powerhouse Status

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Time to Shake Off **Sewol Ferry Trauma**

t is predicted that the recent Sewol ferry disaster will result in economic losses of over 1.5 trillion won (US\$1.46 billion) with domestic consumer sentiment dampened to the point of cutting this year's national economic growth rate by 0.1 percentage points.

The direct costs associated with the catastrophe have also already exceeded one trillion won.

Under the circumstances, the reshuffled economic team of the Park Geun-hye administration sets sail led by Deputy Prime Minister candidate Choi Kyung-hwan, who is a key pro-President figure. Economic experts are making various calls on it already.

One of their common demands is a set of aggressive economic stimulus measures and a rapid implementation of a three-year economic reform plan to beat the aftereffect of the sinking of the Sewol ferry and continue the pace of economic recovery. In the short term, they are particularly calling upon the government to revitalize the real estate market and take action against any possible hike in the value of the Korean currency.

A couple of years from now will be the perfect time for Korea to join the ranks of advanced economies by breaking the vicious cycle of slow growth. The Korean government should iron out solutions to an aging society and better fulfill the three year plan for economic innovation, both of which are keys for entering an advanced economy.

Moody's has recently come up with a rather optimistic report about the future of the Korean economy. Still, it added that the two problems mentioned above have to be resolved in advance for Korea to enjoy a per-capita GDP higher than that of Japan and France in 2018.

The working-age population of Korea is estimated to decrease from 2016 on. Harvard University professor David Bloom claimed during a recent Bank of Korea conference that the aging trend in Korea cuts 0.87 percent from its annual economic growth rate each year. Besides, time is ticking for the incumbent administration to carry out its three year plan focused on changing the fundamentals of the domestic economy. A parliamentary election is scheduled for April 2016, which means only two years or so are left for the government to be committed to the economy.

These days the slogans of creative economy, deregulation, economic innovation, and so on are not heard much due to the massive news of the Sewol ferry. But now is the time for economic participants in Korea to escape from this trauma, capitalizing on the launch of the new economic team.

> Park Jung-hwan, Publisher & Editor-in-Chief





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Samsung Management

What Are Keys for Successful Samsung **Management Succession?**

The share prices of Samsung Group subsidiaries are show-**1** ing a bullish movement session after session, with the ownership structure reform having emerged as a hot issue in the wake of the hospitalization of Chairman Lee Kun-hee. Investors are focusing particularly on Samsung Electronics, Samsung Life Insurance, and Samsung C&T, of which the corporate value and influence in the group are expected to rise down the road.

The most likely scenario as of now is Samsung Life Insurance turning itself into an intermediate holding company, while Samsung Electronics and Samsung C&T become a business unit and a holding company during the succession process. The share prices of these companies gained approximately 3 percent until May 22 from May 12, when the news leaked about the chairman's heart surgery, out of expectations that they will play a central role during the ownership structure reform. Foreign investors jumped on the bandwagon, too.

Although the Samsung Group itself is denying such a possibility, market participants have already come up with a variety of scenarios to cause a rapid rise in the stock prices of certain subsidiaries. For example, Samsung Electronics, Samsung C&T, and Samsung Electro-Mechanics, all of which own Samsung SDS shares, are expected to benefit from the listing of Samsung SDS within this year, a move that was announced on May 8. Samsung Electronics owns 22.58 percent of Samsung SDS shares and Samsung C&T's and Samsung Electro-Mechanics' share ratios are 17.08 percent and 7.88 percent, respectively. Cash greatly in excess of the book value can be available if these shares are turned into cash through secondary distribution during the listing of Samsung SDS.

Samsung C&T at the Center of the Cross **Shareholding Structure**

In particular, Samsung C&T is drawing much attention amid the rapid progress of the Samsung Group's ownership structure reform as of late.

Samsung C&T is an important link in the cross-shareholding structure among Samsung Everland, Samsung Life

Insurance, Samsung Electronics, Samsung SDI, and itself. In addition, it has great influence on the key subsidiaries of the group such as Samsung Electronics, Samsung SDS, Samsung Everland, and Samsung General Chemicals with a share ratio of 4.1 percent, 17.1 percent, 1.5 percent and 37.0 percent each. In other words, Samsung C&T can be regarded as the center of the corporate ownership structure that is in possession of the shares of not just Samsung Electronics, which is the most important subsidiary in the group, but also Samsung SDS and Samsung Everland, which assume a very significant role in the corporate succession.

No specific plan has come out yet with regard to the restructuring of the Samsung Group's construction arm represented by Samsung C&T. However, expert consensus is that an important announcement will be made very soon with the plans for the listing of Samsung SDS and Samsung Everland having been finalized.

One of their scenarios is the launch of a new construction company through the merger of the construction arms of four subsidiaries. Specifically, Samsung C&T can be merged with Samsung Engineering and then partially acquire Samsung Heavy Industries and Samsung Everland. Then, the resulting company becomes the largest builder in Korea.

This hypothesis has become more and more persuasive as Samsung C&T has continued to purchase the shares of Samsung Engineering since July last year. Samsung C&T has raised its share ratio to 7.8 percent as the second-largest shareholder of Samsung Engineering following Cheil Industries. The possibility has been mentioned that it will obtain the 13.1 percent shares of Cheil Industries, which is scheduled to be consolidated with Samsung SDI, too.

At present, the construction business of the Samsung Group is divided into Samsung C&T, Samsung Engineering, Samsung Heavy Industries and Samsung Everland. Some in the group have mentioned that the redundant business needs to be reorganized in the interest of management efficiency.

Another scenario suggested by stock market experts is that Samsung C&T is divided into a general trading company and a construction firm and then the latter is merged with its coun-



Chairma Lee Kun-hee, the only and eldest son Lee Jae-yong, the firstborn daughter Lee Bu-jin, and the second daughter Lee Seo-hyeon

terpart in Samsung Engineering. In this case, the stage can be set for the construction divisions of Samsung Everland and Samsung Heavy Industries to be absorbed by Samsung C&T. Also, the former can be combined with the service division of Samsung Everland so that the construction business and the general trading part are managed by Samsung Electronics vice president Lee Jae-yong and Hotel Shilla president Lee Bu-jin, respectively.

"Samsung C&T is the root of the Samsung Group along with Cheil Industries and assumes a highly important role in its cross-shareholding structure," an industry source explained, adding, "Therefore, it is likely that Samsung C&T is split into a holding company and a business corporation through an equity spinoff so the latter is taken by the construction division and the former combines Samsung Everland and Samsung Electronics Holdings." He continued, "This can be effective in that the shareholding structure can be maintained and vice chairman Lee Jae-yong can retain his control while the construction division is put into restructuring."

The possibility of merger between Samsung C&T and Samsung Engineering is also rooted in the conversion of Samsung Electronics into a holding company.

Samsung C&T currently has an equity value of 11.2 trillion won (US\$10.9 billion) in its affiliated companies, the largest proportion of it in Samsung Electronics. If Samsung Electronics is turned into a holding company now, the Samsung Electronics shares owned by Samsung C&T have to be sold for the removal of circular equity investment. Therefore, Samsung C&T has to be subject to equity spinoff.

However, there is an obstacle to the equity spinoff. The affiliated companies have a low share ratio in Samsung C&T and few treasury stocks. If the equity spinoff is conducted in the current state, Samsung C&T Holdings' shares in the business corporation of Samsung C&T is limited to just 5.9 percent of treasury stocks. The percentage is only 13.1 percent even if Samsung C&T Holdings is merged with Samsung SDI Holdings.

"Samsung C&T may opt to raise its treasury stock ratio and

equity ratio in the group through merger with Samsung Engineering in order to address this problem," said Kiwoom Securities research analyst Kim Byung-ki, adding, "Also, the merger could lead to equity spinoff into Samsung C&T Holdings and the business corporation of Samsung C&T before a consolidation among Samsung C&T Holdings, Samsung Electronics Holdings and Samsung SDI Holdings."

Samsung Everland on Top of the Governance Structure

In the meantime, Samsung Everland, which is on top of the governance structure of the Samsung Group, made an unexpected decision for listing on June 3 and is going to list itself through the selection of the lead manager within the shortest period of time possible. Samsung Everland is the de facto holding company of the Samsung Group and the family of the owner owns 46 percent of the shares. Specifically, the share holding ratios are 25.1 percent, 8.37 percent and 8.37 percent for Samsung Electronics vice president Lee Jae-yong, Hotel Shilla president Lee Bu-jin and Samsung Everland Fashion Division president Lee Seo-hyeon, respectively.

Samsung has a cross-shareholding structure involving Samsung Everland, Samsung Securities, Samsung Electronics, Samsung SDI and Samsung C&T. As such, the listing of Samsung Everland has a massive impact on the entire group. It can be the starting point for the separation of the group through business succession, too.

Its business unit reorganization and consolidation of subsidiaries so far have been more of reshuffle for higher competitiveness than of a rapid transformation in the ownership structure. For example, Samsung SDS, which announced its listing plan on May 8, is in the lower stage of the structure and it is said that its IPO is mainly to procure the financial resources required for the third-generation succession.

The IPO of Samsung Everland is a whole different story though because it implies the full initiation of the corporate succession and separation into the electronics and financial



Samsung family are watching Samsung Lion's baseball game.

segments of the only and eldest son, the hotel, construction and heavy chemical industry segments of the firstborn daughter and the fashion and media businesses of the second daughter.

"The listing of Samsung Everland is what signals a sea change in the ownership structure of the Samsung Group as a whole," said HI Investment & Securities research analyst Lee Sang-heon, adding, "Equity spinoff and the enhancement of corporate value based on the growth potential are easier on the part of a listed company than a non-listed one that is evaluated only by its assets and profit value, which means Samsung's separation and succession processes can be facilitated by means of the IPO."

Another hot-button issue is the equity value of the owner's family after the IPO. Still, the consensus is that the appraisal profit is of little significance unless the family members give up on their group ownership. In addition, Samsung Everland shares have not been traded in the curb market for almost three years and the calculation of the value per share is not easy due to the lack of comparable listed corporations. Some experts, however, estimate the market capitalization of Samsung Everland at around 4.55 trillion won and the three siblings' holding at slightly over two trillion won given that Samsung Everland sold 17 percent of its shares to KCC in December 2011 at a per-share price of 1.82 million won and purchased 15 percent of treasury shares at the equal price.

The probability of profits from the listing appears to be rather higher in the other subsidiaries. The shares owned by some of the subsidiaries can be utilized as investment resources because the shareholding ratio of the largest stockholder and the affiliated persons in Samsung Everland exceeds 65 percent.

Also, Samsung SDI and Cheil Industries, each of which owns 4.0 percent of Samsung Everland shares, are scheduled to be merged on July 1 and are expected to be a useful tool for the group's future business. The equity value of both of the companies reaches 400 billion won assuming a price of 1.82 million per share.

Investors are paying keen attention to the stock price of Samsung Everland, which has been announced to be listed on the KOSPI in the first quarter of next year.

At present, approximately 600,000 out of the 2.5 million securities issued are regarded as outstanding stocks excluding those owned by Samsung Group chairman Lee Kun-hee's family members, subsidiaries of the group and friendly entities such as KCC. However, no stock has been circulated in actuality.

The possible stock price of Samsung Everland can be fathomed by looking into how the companies owning Samsung Everland shares appraise its value. KCC's equity value in it is estimated at 888.1 billion won according to KCC's audit report for Q1. The company has 425,000 Samsung Everland shares and the per-share value is approximately 2.09 million won.

Securities experts say that Samsung Everland's value is at least seven trillion won given its business and assets. However, the stock price after the IPO is likely to go much higher when its central position in the corporate structure of the Samsung Group and its growth potential in overseas markets are taken into account.

According to market sources, the proper stock price of Samsung Everland is about 3.65 million won. Shinhan Investment & Securities calculated the value of the food and culture business unit of Samsung Everland at 908 billion won, 16 times the price earnings ratio of Hyundai Foodville, while estimating the values of the construction and leisure divisions at 729 billion won and 701.4 billion won each allowing for the domestic average PER and land prices. Also, its fashion business unit, bought from Cheil Industries last year, has been priced at 1.0.5 trillion won, which is equal to the transfer price.

"Samsung Everland's total enterprise value amounts to 7.6 trillion won even by conservative calculations," said Song Inchan at Shinhan Investment & Securities, continuing, "However, the amount can be as high as 9.1 trillion won assuming that the land price rises beyond the book value." Then, the proper stock price ranges from 3.05 million won to 3.65 million won, which is second to none in the KOSPI and the KOSDAQ alike.

The share price is predicted to show a bullish movement for the time being after the IPO. Although the price will be around its company value in the long term, market participants' preference for Samsung Everland, which is on the topmost position of the ownership structure of the Samsung Group, can go beyond the enterprise value with the ownership structure reform underway in earnest.

Revised Insurance Bill, Hurdle to the Role of Samsung Life Insurance

The structural reform of the financial subsidiaries of the

Samsung Group has been put to the test, as the revision bill to the Insurance Business Act, which is called the detonator for Samsung's financial affiliates, is about to pass the National Assembly amid the acceleration of the structural reform and stake rearrangement of the financial affiliates.

Once the revision bill is passed, Samsung Life Insurance has to sell its Samsung Electronics shares, and then the Samsung Group will take various measures to defend the electronics company. In this case, conversion to a holding company, which has been officially denied by Samsung, is a likely scenario. Closer collaboration among the banking subsidiaries through share ownership reorganization and the separation of banking and commerce in the group are likely to follow, too.

Industry insiders are predicting that Samsung Life Insurance will buy the 37.5 percent Samsung Card shares owned by Samsung Electronics, while continuing to purchase the shares of Samsung Fire & Marine Insurance and the credit card company if necessary. Signs are shown as well that the banking subsidiaries are drawing a big picture of organizational restructuring.

According to the current Insurance Business Act, the upper limit applied to an insurer's ownership of marketable securities in its largest stockholder or affiliate is set to 3 percent of the total asset based on the acquisition value at the time of the purchase of the marketable securities. In the amendment, the acquisition value is replaced with market price and the stake exceeding the upper limit has to be disposed of. If it is passed as it is, Samsung Life Insurance has to sell most of its 18 trillion won (US\$17.7 billion) worth of shares in the group, including those of Samsung Electronics worth 14 trillion won (US\$13.7 billion), within a grace period of five years.

One of the problems is that the protection of Samsung Electronics could be tough in this case. Samsung Life Insurance is the largest stockholder of the electronics company with a share ratio of 7.6 percent. Excluding that, the Samsung Group's shareholding percentage in it drops to as low as slightly over 7 percent, 4 percent owned by Samsung C&T and 3 percent or so by chairman Lee Kun-hee. This is why such scenarios are mentioned as the equity spinoff of Samsung Electronics for a merger with Samsung Everland and potentially with tentatively-named Samsung C&T Holdings.

In this case, Samsung Life Insurance has to take the form



Share Value Estimates of Major Stockholders When Samsung Everland is Listed

Major Holders	Stock Holdings (%)	Stock Values (billion won)
Lee Jae-yong	25.1	1,141.8
Lee Kun-hee	3.72	169.3
Lee Bu-jin	8.37	380.6
Lee Seo-hyeon	8.37	380.6
Lee Yu-jung	0.48	21.8
Samsung Card	5.00	227.5
Samsung Electro Mechanics	4.00	182.0
Samsung SDI	4.00	67.3
КСС	17.0	773.5

^{*} Stock values are based on the price of 1.82 million won per stock at which KCC bought 2011

of an intermediate financial holding company. However, no legislation has been made to permit the introduction of that type of holding company, and the share sale is likely to pose a significant challenge, while controversies surrounding a special favor add difficulty to such conversions.

In the meantime, it is also expected that the revision bill will be altered at least to some extent because Samsung will not look on the passage of the original amendment and the National Assembly is pressed for time ahead of the by-elections scheduled for late July. The grace period could be extended as a compromise, too.

In April this year, Samsung Life Insurance and Samsung Securities acquired 100 percent of the shares of Samsung Asset Management and Samsung Futures, respectively. Structural reshaping is sure to follow once the stock acquisition processes are wrapped up soon. It is in this vein that Samsung Life Insurance is currently mulling over combining the investment division of the real estate business unit with Samsung SRA Asset Management, which is a fully-owned subsidiary engaged in real estate asset management, in a bid to improve the efficiency of investment. Similar moves can be witnessed between Samsung Life Insurance and Samsung Asset Management and between Samsung Securities and Samsung Futures.

The reshaping of the shareholding structure is expected to speed up due to the worsening health conditions of the chairman, too. Samsung Life Insurance holds a 34.4 percent stake in Samsung Card, 10.4 percent of Samsung Fire & Marine Insurance, and 11.1 percent in Samsung Securities as of now. If the group adopts a holding company system, the life insurance arm becomes an intermediate financial holding company and has to meet certain requirements for affiliate incorporation - possession of at least 30 percent of the shares in a listed one, and at least 50 percent in a non-listed one, to be exact.

However, it is too early to determine whether or not Samsung Life Insurance will continue stock purchases, with the Samsung Group officially denying conversion to a holding company. Nonetheless, the company may begin to dispose of its shares in Samsung Electronics and buy those in the financial arm at the same time upon the passage of the bill.

Expansion of Economic Territory

Economic Diplomacy to Central Asian Countries

President Park Geun-hye is paying a state visit to Uzbekistan, Kazakhstan, and Turkmenistan for six days from June 16. She departed from the Seoul Airport yesterday morning and arrived in Tashkent several hours later.

The purpose of the visit to the three Central Asian countries is the promotion of the Eurasia Initiative and assistance in the business of Korean companies there capitalizing on resource diplomacy. The Eurasia Initiative, which is a part of the international cooperation scheme of the Korean government, is to expand Korea's economic territory for the future and set the foundation of peace in the Korean peninsula by combining the Eurasian continent into one economic bloc.

Her first destination is Uzbekistan, where she is scheduled to meet with President Islam Karimov today, June 17. On June 19 and 20, she meets with Kazakhstani President Nursultan Nazarbayev and Turkmenistan President Gurbanguly Berdimuhamedow, respectively.

During the summit talks, the parties are going to check the progress of major bilateral cooperation projects such as the Surgil Gas Project in Uzbekistan and the Balkhash Coal-fired Power Plant Construction Plant in Kazakhstan, and discuss how to better support Korean companies in these regions.

Extended, Continuous Cooperation with Uzbekistan

In her state visit to Uzbekistan President Park Geun-hye held a summit meeting with President Islam Karimov on June 17 and exchanged views on economic cooperation worth US\$12.9 billion, including gas fields and solar energy generation.

Both presidents evaluated the cooperation in large-scale projects worth US\$8 billion including Surgil gas field development and gas chemical plant construction, Talimarjan combined cycle power plant construction, and gas-to-liquid (GTL) projects. Simultaneously, the two leaders agreed to continue cooperation for the smooth execution of these undertakings.

The two leaders also agreed on continuous cooperation in new ventures such as Kandym gas field expansion, construction of a gas restoring factory and solar energy plant, and e-government implementation.

The Kandym project, a US\$4 billion gas mining and restoring facility, is invested in by Russia's Lukoil and National Holding Company (UNG) at the ratio of nine to one.

The e-government project amounting to US\$300 million has been carried out in Uzkek's public organization by two Korean ICT specialists since last year. President Karimov requested to invite Korean specialists during his visit to Korea in 2012.



President Park Geun-hye and Uzbek President Karimov shake hands after signing the "joint statement of strategic bilateral development" at the Presidential Palace in Tashkent on June 17 (local time).

The two leaders also agreed to sign an MOU on bilateral textile industry cooperation and textile technopark development, since Uzbekistan is a nation with great human resources (30 million) in central Asia as well as the sixth largest cotton-producing nation in the world.

Beyond the Current Economic Cooperation with Kazakhstan

President Park arrived in Kazakhstan on June 18 following a three-day state visit to Uzbekistan.

South Korean President Park Geun-hye and her Kazakh counterpart Nursultan Nazarbayev announced on June 19 a common communiqué to work closely together for realization of the major energy and power projects currently underway, as well as further cooperation for new energy projects between the two countries.

The new projects include a contract under which South Korea would provide the Kazakhstan Electricity Grid Operating Company (KEGOC) with US\$18.8 billion worth of electricity for 20 years, which will be produced from the Balkhash coal-fired power plant under construction by Samsung T&C. The deal is expected to help finance the plant project and help launch its construction in the second half of the year. One official in Cheongwadae, the Korean presidential office, said, "This project is the first build-operate-transfer (BOT) project in Kazakhstan," adding, "The project financing will be completed within the year, and the construction of the plant will be finished on April, 2019."

South Korea also signed a total of US\$5 billion in new energy projects including a US\$3.5 billion project for expansion of the Tengiz oil field on the shores of the Caspian Sea. South Korea will also be taking part in the joint exploration of a lead and zinc mine in Karagandy Province, central Kazakhstan, with the aim of winning the rights to exploit the mine.

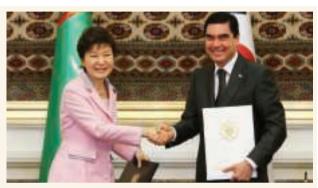
Due to the new projects, the total value of economic cooperation between the two countries has come to reach US\$33.1 billion when these projects are grouped together with three existing major projects such as a US\$4.9 billion coal-fired power plant in the southern Kazakh city of Balkhash, a US\$5 billion project to build a petrochemical complex in Atyrau on

ery of natural gas to liquid fuels such as kerosene and diesel.

In addition, at the summit, South Korea obtained the right to sell products produced from the existing plants, including a US\$7 billion worth of chemical products produced in the gaschemical plant as well as a U\$750 million worth of sulfur from a joint desulfurization facility.



South Korean President Park Geun-hye and her Kazakh counterpart Nursultan Nazarbayev shake hands on June 19 after announcing a common communiqué for mutual economic cooperation.



President Park Geun-hye and Turkmen President Gurbanguly Berdimuhamedov shake hands on June 20 after signing an MOU for economic cooperation between the two countries.

the northern banks of the Caspian Sea, and a project to drill oil from the Zhambyl field in the Caspian Sea. In particular, President Park asked the Kazakh counterpart for his continued support in the continuous exploration of the Zhambyl oil field, with the aim of beginning actual drilling. An initial study put the field's reserves at 100 million barrels, but the two sides have yet to determine its economic feasibility.

Park and Nazarbayev also agreed to expand bilateral cooperation to new areas such as health, forestry and infrastructure construction as part of efforts to promote their countries' mutual growth and contribute to Kazakhstan's industrial diversification.

Kazakhstan is the largest destination of South Korean investment in the region, with more than 250 South Korean firms operating there. Last year, the two-way trade reached a record US\$1.32 billion.

Opening New Frontier with Turkmenistan

South Korean President Park Geun-hye arrived in Turkmenistan afternoon on June 20 (local time) for her state visit to the permanently neutral country in the Central Asia. President Park is the first South Korean leader to visit Turkmenistan since the official diplomatic relation was established in 1992 between the two countries.

President Park Geun-hye and her Turkmen counterpart Gurbanguly Berdimuhamedov at the summit meeting on the day agreed on a pair of major economic projects expected to propel bilateral relations down the road.

The two leaders signed a memorandum of understanding to construct a total US\$5 billion worth new plants. One project is the construction of a US\$2 billion gas-chemical plant in the Seydi District of Lebap Province in northeastern Turkmenistan, and the other is for construction of a US\$3 billion worth refin-

Turkmenistan will buy 900 buses worth U\$100 million from South Korea between 2015 and 2020. Some buses will be used for hosting the 5th Asian Indoor and Martial Arts Games in Ashgabat in 2017

The two leaders also pledged to cooperation on developing oil fields of Turkmenistan, which has the world's 4th largest reserves of natural gas. The formal contract is to be made after conducting six months' feasibility study.

President Park said, "The two countries could create a winwin cooperation model for mutual economic growth by combining the rich natural resources of Turkmenistan and Korea's experience in economic development and cutting-edge technologies."

The two leaders also agreed to expand the cooperation in transportation and agricultural fields as well as strengthen exchanges in the areas of education and sports. They also signed the double tax avoidance agreement and agreed to finish the talks on investment promotion and protection as soon as possible.

The Presidential office remarked, "President Park expanded the diplomatic horizon for Eurasian countries through the visit to Turkmenistan that has a big potential for economic cooperation.

President's visit to Turkmenistan was the final leg of a six-day Central Asia trip including those to Uzbekistan and Kazakhstan.

The main focus of the 6-day trip was to expand bilateral cooperation especially in the energy sector with each country, along with laying a foundation for President Park's "Eurasia initiative." The initiative was ironed out from the idea to build more infrastructure and expanding free trades between Eurasian nations to create what could become a large single market rivaling the European Union.

Between US, China

South Korea at a Critical Diplomatic Juncture



Washington and Beijing are putting pressure on Seoul over the same diplomatic issues.

Specifically, the issues refer to the missile defense system of South Korea and the resumption of the six-party talks. The United States is seeking to deploy its Terminal High Altitude Area Defense (THAAD) program to Korea while China is asserting that the THAAD can be brought into Korea only at the sacrifice of the Korea-China relations. Both have different stances over the six-party talks as well, decreasing the number of

options Seoul can choose from.

The Korean government is in no position to take sides. Accepting the demand of the U.S., which is the greatest ally, could result in opposition from the number one export destination larger than the U.S. and Japan combined.

"We are planning to deploy THADD in Korea and I myself made a personal request for it, too," said Curtis M. Scaparrotti, Commander in Chief of the ROK-U.S. Combined Forces Command. The plan is taking more and more concrete shape over time.

China is dead set against this scheme. "The deployment of the missile defense system in the Korean peninsula is by no means beneficial to the regional stability and strategic balance," Foreign Ministry Spokesperson Qin Gang declared. The Xinhua News Agency echoed by saying, "The THAAD in Korea will sacrifice the Sino-Korean relations."

South Korea is in a catch-22 situation when it comes to the six-party talks issue, too. Recently, American and South Korean officials reconfirmed their stance in Washington D.C. that the six-party talks cannot be resumed without efforts of the North, which is contrary to that of Chinese Foreign Minister Wang Yi. Beijing expressed its regret over the Washington-centered diplomatic policy of the South. This could affect the upcoming state visit of Chinese President Xi Jinping to Korea.

Korea-UAE Cooperation

Korea Requests Further Participation in US\$40 Billion UAE Infrastructure Projects

President Park Geun-hye met with Sheikh Mohammed Bin Zayed Al Nahyan, the Crown Prince of Abu Dhabi, on May 20 and promised to work more closely together in the field of nuclear power generation. She also asked for greater participation of Korean companies in mega-scale projects for the construction of petrochemical complexes, railway networks, and the like worth US\$40 billion combined.



President Park Geun-hye shakes hands with Sheikh Mohammed Bin Zayed Al Nahyan, the Crown Prince of Abu Dhabi, at the Emirate Palace Hotel in the UAE on May 20 (local time).

"I had to cancel most of my schedule, except for the reactor installation ceremony in Barakah, due to the Sewol ferry disaster," said the President, adding, "I believe that our bilateral cooperation in atomic power generation, which has symbolized the two countries' century-long partnership, will get a further boost through the ceremony."

The Crown Prince responded by saying, "I would like to express my condolences to everyone suffering from the accident along with my deep gratitude for President Park Geun-hye's visiting our country to keep her promise with us under such circumstances." A total of four nuclear power stations are scheduled to be built in the UAE by 2020 at a combined cost of approximately US\$40

billion.

In the meantime, the consortium of the Korea National Oil Corporation and GS Energy succeeded in producing petroleum on a commercial scale at an undeveloped exploration site in the UAE. It is going to assess the reserve and set up development plans this year, declare commercial viability in 2015, and start full-scale production in 2017.

The consortium concluded a contract with the Abu Dhabi National Oil Company (ADNOC) two years ago to work on three local undeveloped properties and participate in the development of two onshore and one offshore sites of the ADNOC with an equity share of 40 percent. In addition, the two countries agreed recently to expand their cooperation in the medical field through the simplification of pharmaceutical licensing and exemption of due diligence for pharmaceutical factories. They are also planning to help local financial institutions do business in both countries by means of an MOU for comprehensive assistance.

National Competitiveness

Korea Fell Four Notches in IMD National Competitiveness Index



Torea took the 26th place in the 2014 National Competitiveness Assessment of the International Institute for Management Development (IMD), which was announced on May 22. The country had ranked 22nd for three consecutive years until 2013.

The United States and Switzerland retained the first and second spots again, while Singapore climbed two notches to third. Japan rose from 24th to 21st, whereas China and Taiwan fell from 21st to 23rd and from 11th to 13th, respectively.

The IMD mentioned the inefficien-

cy of the government and the corporate sector as a factor affecting the national competitiveness of Korea. Specifically, it fell from 20th to 26th in government efficiency and from 34th to 39th in corporate efficiency, while ranking 20th in economic achievement and 19th in infrastructure.

In the government efficiency segment, government subsidy (second), fiscal balance (fifth), and foreign exchange reserve (seventh) were considered as strengths, contrary to high tariff barriers (58th), tax evasion (57th), and aging risks (46th).

In the corporate efficiency segment, the annual average working hours (third) and the number of public companies (ninth) were seen as merits, along with the understanding of the necessity of economic and social reforms (11th). However, poor performance was recorded in the appropriateness of auditing (59th), adaptation to market changes (56th), and productivity of labor-management relations (57th).

In particular, Korea's competitiveness in scientific and technological infrastructures are the sixth and eighth highest in the world, respectively.

Korea climbed a notch from a year ago in terms of the competitiveness in scientific infrastructure. It had ranked fourth in 2010 and fifth in 2011 and 2012 in this assessment category. It jumped from 11th to eighth in the other segment to continue its upward movement from 18th in 2010 and 14th in 2012.

It has been found in this year's report that Korea's consistent efforts for higher R&D investment and the implementation of innovation policy have resulted in significant quantitative growth in the number of researchers, research papers, patents, exports of hightech products, and R&D investment. However, the IMD also pointed out that there is still much room for improvement when it comes to the legal and systemic environments associated with intellectual property rights protection and cyber security, degree of satisfaction on the part of researchers, corporate capabilities for innovation, and cooperation between the academia and industry.



National Influence

Korea Voted 11th Most Positivelyinfluencing Country in the World



South Korea ranked 11th on the list of the countries with the most positive influence in the world in a survey recently conducted by the BBC. North Korea was found to be the second most negatively-influencing country, following Iran.

The BBC conducted the survey from December 2013 to April 2014 with

research consultancy GlobeScan and PIPA. A total of 24,542 people answered the survey in 24 countries around the world. It was Germany that topped the chart for the second consecutive year.

The question was what countries have had a positive or negative influence on the world. Germany was followed by Canada, the U.K., France, Japan, the E.U., Brazil, the U.S., China, and South Africa.

Meanwhile, Iran and North Korea were followed by Pakistan, Israel, Russia, China, the U.S., and India as those most negatively influencing the world.

North Korea's Trade Volume

North Korea Set New Record in Trade Volume Last Year

North Korea's foreign trade amount set a new record last year.

According to KOTRA's report published on May 21, North Korea's external trade volume, excluding the trade between the two Koreas, reached US\$7.34 billion in 2013, with a year-on-year growth rate of 7.8 percent.

Exports and imports by the North increased 11.7 percent to US\$3.22 billion and 5.0 percent to US\$4.12 billion, respectively. The trade deficit decreased slightly from US\$1.05 billion to US\$980 million. The expansion of trade can be attributed to the export of mineral resources such as coal, iron ore, copper, and aluminum, and textile and clothing goods, and the import of electricity, transport machinery, grain, etc.

China was the largest trade partner of North Korea in 2013. The North's trade volume with China added up to

US\$6.54 billion (US\$2.91 billion in imports and US\$3.63 billion on exports) and gained 8.9 percent from a year earlier. The ratio of the trade with China was 89.1 percent and continued its upward movement since 2005, when the percentage topped 50 percent. This implies the Chinese government's economic sanctions that followed the missile launch in December 2012 and nuclear test in February 2013 have rarely affected bilateral trade.

China was followed by Russia, India, Thailand and Singapore. The trade amount between North Korea and Russia jumped 37.3 percent from a year ago to US\$104 million, as the import of machinery and transport equipment soared through the Rajin-Hassan Railway, which was opened in the second half of 2013.

In the meantime, the North record-



A loaded truck is going to Shineuiju City, which borders China and North Korea.

ed no trade at all with Japan since 2009. No trade has been made with the United States either, except for the limited humanitarian aid of food and daily necessities, with the economic embargo in place.

The major export items of North Korea were mineral resources such as coal and brown coal. The exports of these items rose 14.9 percent to US\$1.43 billion, accounting for 44.4 percent of the total exports. Most of these were shipped to China. The exports of clothes and textile products increased as much as 33.5 percent to US\$502 million as well, along with aluminum, steel products, and dairy produce. The main import items were mineral oil such as crude and refined oil. The import amount totaled US\$780 million, 3.8 percent down from the preceding year.

North Korea Wages

Wages of North Korean Employees in Kaesong Industrial Complex Raised by 5%

Ministry of Unification spokesperson Kim Eui-do announced on June 9 that the governments of both Koreas agreed to raise the minimum monthly wage of the North Korean workers in the Kaesong Industrial Complex by 5 percent to US\$70.35 starting from May.

Back in 2003, Seoul and Pyongyang had set the maximum wage increase rate for those workers at 5 percent a year. Since then, their salary has been raised by 5 percent in each August in most cases. The earlier-than-usual wage adjustment at this time is the result of North Korea's demand for a 10 percent increase and South Korea's adhesion to the principle.

Earlier this year, North Korea insisted that the wage be raised by 5 percent in March and August each because it remained the same last year due to the shutdown of the industrial complex. Seoul, in response, partially accepted the proposal in view of the business activities there while adhering to the existing principle.

The wage is calculated by adding overtime and holiday pays, bonuses and incentives to the minimum salary. The sum is approximately US\$135 to US\$150 for each of the 52,000 or so workers. Korean companies bear about US\$87 million a year concerning the activities in the industrial complex. The increase in wage at this time is expected



to result in around US\$4 million flowing additionally into the North.

"North Korea's foreign trade has expanded for the fourth consecutive year since 2010, despite economic sanctions by the international community. This is due mainly to the increase in the export of mineral products to China," KOTRA explained, adding, "The North is likely to focus on the amelioration of bilateral relations with Russia to address its dependence on China."

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Carbon Tax Ahead

Carbon Tax on Vehicles Could Affect Automaker Sales

The government is reexamining the carbon tax on vehicles six months ahead of the implementation as its negative impact on local industries is determined to be more severe than expected. Besides, it is predicted that the new tax will bring greenhouse gas reduction effects below expectations, only to impose a burden on the national economy. The paradox of regulation is well founded in a joint report of the Korea Institute of Public Finance, the Korea Institute for Industrial Economics & Trade, and the Korea Environment Institute.

According to the report, the amount of carbon emissions cut by the tax is less than previous estimates. Specifically, it is forecast to be around 500,000 tons, though the government estimated it at 1.6 million tons for 2015 to 2020 during the establishment of a legal basis for the tax on the Framework Act on Low-Carbon Green Growth four years ago. The recent survey result of 500,000 tons

assumes an upper limit of the charge of 4 million won (US\$3.916) per vehicle.

Nonetheless, the Ministry of Environment is still asserting that the target can be met by increasing the upper limit. Auto industry participants are opposed to such increases, arguing that the ceiling of four million won is already burdensome.

Besides, the domestic auto industry could take a direct hit if the tax is put into place from as early as next year. The sales volumes of Hyundai Motor Company and Ssangyong Motors are estimated to be decreased by 3,800 (0.9 percent of the total) and 1,500 units (4.5 percent) as of 2015. The losses reach approximately 95 billion won (US\$93.1 million) and 37.5 billion won (US\$36.7 million) when the Sonata and Korando C, priced at 25 million won (US\$24,476) each, are put into the calculation. Ssangyong is likely to suffer particularly great damage because it manufactures no hybrid vehicles and has an SUV-centered lineup.

In contrast, German and Japanese cars are expected to enjoy at least some increase in sales thanks to their hybrid and diesel technologies, while U.S. carmakers such as Ford are witnessing a drop in sales. Mercedes Benz, BMW, and other German automakers are predicted to further cement their presence in Korea by capitalizing on the subsidy with their popularity in Korea on the rise.

Another concern is the possibility of a trade conflict with the U.S., which is leading the Trans-Pacific Partnership (TPP). "There are some things that have yet to be done in the car industry before the complete implementation of the KORUS FTA," said U.S. President Barack Obama during his visit to Korea last month. Those in the know say that the remark has to do with the carbon tax on vehicles.

It has been also pointed out that U.S. automakers could put greater pressure on Congress with this opportunity. They



have insisted that the KORUS FTA is lopsided in favor of Korea and lays a burden on the trade balance.

"Bomus-Malus of France, which is the benchmark model of the carbon tax of the Korean government, is a de facto non-tariff barrier," said another industry source, adding, "As such, the introduction of the carbon tax may be too much with the TPP and FTAs underway simultaneously with a number of countries."

The government is mulling over how to tide this over in various ways. It

will hold a public hearing in mid-June to finalize its stance. The easiest option is to postpone the implementation of the law. However, strong opposition is expected from environmental organizations and the Ministry of Environment in this case.

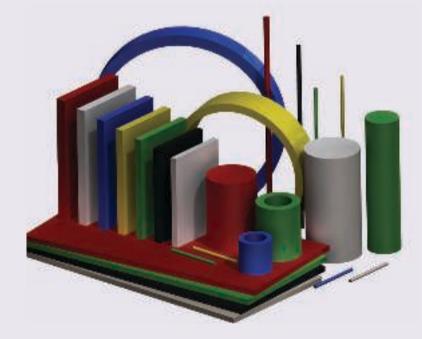
Matching Up to the Policy

Engineering Plastic Market in Rapid Expansion

The engineering plastic market is achieving economy of scale, mainly in the car materials market, by taking the place of iron and benefiting from the low carbon policy and the trend of vehicle weight reductions.

According to industry sources, Toray, which is leading the global engineering plastic market, is going to expand its carbon fiber reinforced plastic (CFRP) production and post-processing facilities from the second half of this year to 2016 to better meet the fast-increasing market demand. The carbon fiber market leader took over Dome Carbon Magic, a composite material developer, in April last year and Zoltek, the third-largest carbon fiber company in the world, in September at a cost of 700 billion won (US\$683.9 million). Toray raised its carbon fiber market share to over 30 percent through this process, and is now building a polyphenylene sulfide (PPS) production plant in the Saemangeum Industrial Complex in North Jeolla Province via Toray Advanced Materials Korea. A total of 300 billion won (US\$293.1 million) is being invested in the factory, which is scheduled to manufacture 8,600 tons of PPS resin and 3,300 tons of PPS compound a year.

This is to satisfy skyrocketing demand from global automakers. The carbon fiber market, in fact, is still in its early stage, with the market size having

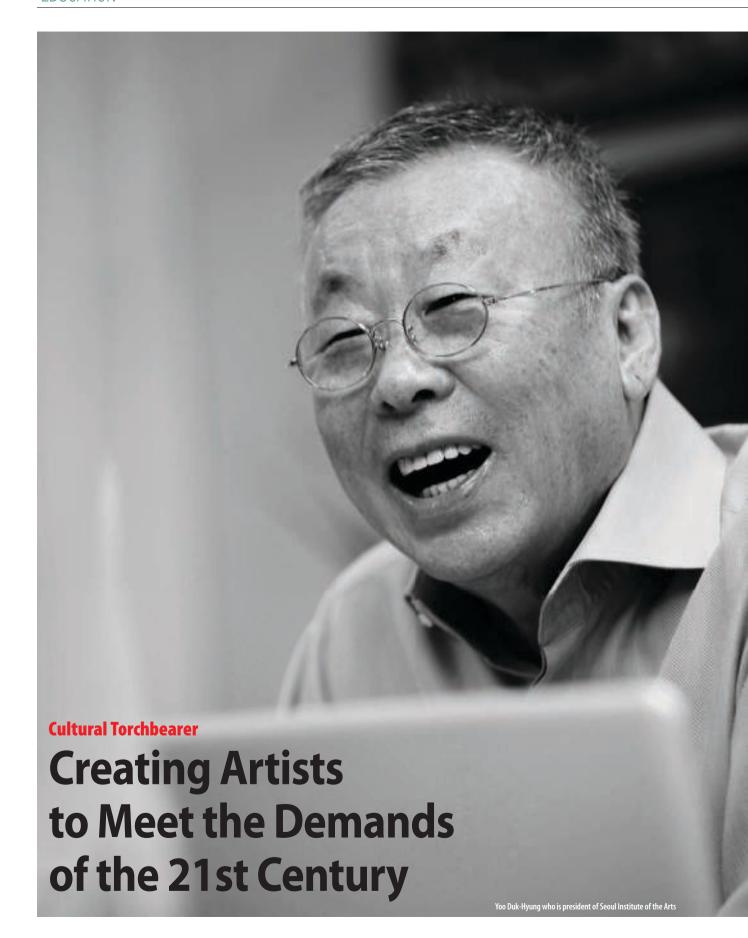


reached 50,000 tons and US\$2 billion last year. However, the annual growth rate is 11 percent, and can be further boosted as global chemical companies expand their facilities and automakers resort to carbon fiber to reduce the weights of their vehicles in the face of fuel economy regulations.

Korean companies are jumping in the engineering plastic market one after another, too. For example, Hyosung unveiled the carbon fiber brand of Tansome and started the commercial production last year. It is going to boost the annual production capacity from 2,000 tons to 17,000 tons by 2020 with an investment of 1.2 trillion won (US\$1.1)

billion). The Tansome has recently been used in Hyundai Motor's concept car Intrado. In addition, Hyosung developed polyketone on its own for the first time in the world and began the commercial-scale production of the high molecular engineering plastic.

SK Chemical is working on a PPS manufacturing plant with Teijin Chemical, a Japanese chemical firm, in Ulsan. It also produces prepreg using the carbon fiber materials supplied from Mitsubishi Rayon. GS Caltex, in the meantime, unveils its prototype products next year which are produced from petroleum by-products.



BusinessKorea recently spoke with Yoo Duk-Hyung, president of Seoul Institute of the Arts and a living legend of Korea's modern performing arts history. A pioneer in opening and developing new chapters of Korean arts, Yoo is known for his experimental adventures into unexplored territories. We asked him about his long-term goals and interpretation of the current state of the Korean artistic scene. Speaking at length on these topics as well as Korea's artistic role on the global stage, what follows are highlights from the interview.

Could you first introduce us to the history of Seoul Institute of the Arts?

It has been 52 years, this year, since Seoul Institute of the Arts was established by Dongnang Arts Foundation. Dongnang Arts Foundation has its roots in the Korean Theater Research Institute founded by a scholar "Dongnang" Chi-Jin Yoo in 1958.

In 1958, Chi-Jin Yoo founded the Korean Theater Research Institute.

Dongnang also built the affiliated Drama Center and Theater Library in 1962. In the same year, he also started the Korean Theater Academy, which has become what is today Seoul Institute of the Arts.

Yoo pioneered a new landscape of director's plays in the Korean theater culture.

After graduating from Yonsei University in 1963, I studied at Trinity and Yale Universities in the U.S. I then worked at many famous performance groups as a director, lighting designer, and set designer, supported and funded by the Rockefeller and Ford Foundations.

In 1966, when the play "Rashomon" acted by Fay and Michael Kanin was performed in Dallas Theatre Center, I managed a broad spectrum of direction including stage art, lighting, and costumes for the performances. This garnered great interest and expectations from American critics and press.

When I came back to Korea in 1966, I presented "Duk-Hyung Yoo Direction Plays" in the Drama Center, and I suppose this was the very first play performed under a director's name.

I have been trying to introduce a new theater style based on direction that can surpass the limits of existing plays but then replace them with frames of time and space. Back then, mainstream Korean theater emphasized dialogues through strong playwriting. However, I have been consistently attempting to highlight the director's sense of beauty by delivering messages via visual, auditory, and sensual channels.

And very thankfully, my theatrical experiments have been appreciated by theatrical and academic professionals as "a remarkable revolution in the Korean theater history which announced the emergence of a super creative director." I have been even more encouraged to complete the systematic beauty of my plays.

In November 1971, invited to the 3rd World Theater Festival held in Manila by ITI [the International Theater Institute], I

dramatized the play "Alamng" and directed it with the Filipino theatrical company "Kalinagan." I also directed the play "Jilsa" with New York LaMaMa E.T.C. in 1974. These are the two most unforgettable projects I have done so far.

At that time, Mrs. Rosamond Gilder, an honorary president of ITI and the world's most renowned theater critique, chose along with representatives from many countries "Alamng" as the best production of the festival. The review in the Manila Times was even more complimentary, stating "Alamng is one of the world's most impressive plays in recent years, and this realized the dream of reviving Asian traditional cultures in the middle of Western influences."

What are reasons you chose to become an educator, putting the life of an artist behind you?

My late father, Dongnang, strived to maintain and restore our own artistic culture through creative production and education. Through the Drama Center, the Korean Theater Research Institute, and the affiliated Theater Academy from 1970, I have done my utmost to honor his last wishes. I have also desired to revive and further develop our national culture by reinterpreting and recreating our traditions while being proactive and progressive towards globalization at the same time.

My philosophy in art education is "to propagate Korean national arts to the world." This has always been my lifelong mission when I was a director, even before today's globalization.

In order to promote my motto above, stay true to the philosophy of having established the school, and guide the future of Seoul Institute of the Arts, I launched the "Special Studies" in 1981. This is very important, as all of my purposes above are reflected in this program.

Phase One of the Special Studies program is to study the fundamental components of the arts. Phase Two connects the arts to science. Phase Three includes the ranges of history, the humanities, and science to create art. And finally, in Phase Four, one learns the matrix in which arts and society are linked together. I aim to show the educational prototype of the arts, systemize identity development as an artist, and ultimately obtain international universality based on our national cultural identity.

One aspect of Special Studies is to create our national arts in the end. The other is to find internationally-accepted components among time, space, rhythm, and energy, of our traditional arts and then promote Korean culture worldwide, which is my insight into future art.

Since then, I have been trying to emphasize the issue of arts and sciences in view of Special Studies. I have also been preparing the future motto of Seoul Institute of the Arts and 4 educational indicators of a world-class educational environment, integrated education, strong cooperation with businesses, and a hybrid combination of arts and sciences.

Seoul Institute of the Arts currently has various high-quality programs to combine arts and technology and promote creative experiments through ATEC [the Art & Technology Cen-



ter] and the ACC [Art & Creation Center].

Our institute provides a Bachelor of Fine Arts degree in the School of Performance and the School of Creative Media. The schools are designed with the advances in technology in mind. This new educational paradigm eliminates the walls between the schools, genres, and majors. Our students receive training that prepares them to become professionals in their chosen field and artists that can stand on the world stage.

The Associate of Arts degree program is divided into the schools of performance, media, creative writing, design, music, and communications. The students are encouraged to explore art forms with an interdisciplinary education across all the schools. When the students are ready to graduate they will have received basic vocational arts training.

Why was Ansan chosen as the second campus?

We must adapt to the rapidly evolving arts and entertainment world and realize the 21st century vision of art education. I concluded that we needed to fundamentally restructure our educational system by creating a second campus as a part of our medium and long-term plans for advancement.

After extensive research throughout all of Seoul and its adjacent areas, Ansan, near Gwangduk Mountain was selected because the space provided the ideal conditions for our new educational system.

It took me five years to design this campus to include the artistic spirit of our generation, the zeitgeist, and cultural senses everywhere to be the most appropriate arts education space. Accordingly, all buildings are no taller than three stories, spread out but connected to each other, in order to make education flow efficiently, performances more practical, and classes more convenient.

I have also attempted to harmonize natural surroundings and educational spaces so that the entire 231 million square

meter space can be one "Cultural Theme Park." More specifically, all kinds of rooms and spaces, either inside or outside, have a good sense of balance, and any classes or performances can be held anywhere. Eventually, our Ansan campus won "The Korean Architecture Award," which was the first time for a college building.

Naturally, the original Namsan campus became more specialized as an art center for professional content and our new campus offered the multi-dimensional education for artists on their path to become professionals. I believe that this is the most ideal form of art education, since creative exploration, as well as real world experiences, are supplied to our students on our two campuses.

This is why the Seoul Institute of the Arts has 14 different majors in its dual campus system, with Ansan focused on the academics and fundamental training of art education and Namsan provides the environment for actual professional-level productions as well as the space to present them in.

One of the most outstanding features of Seoul Institute of the Arts is the "Global CultureHub program." Could you please elaborate on this?

I have tried to systemize the curriculum and education system in order to realize my personal goal of obtaining international universality based on Korean traditional arts, as well as proposing new art education models and creative directions. This also enables professors and students to have their own sense of arts in relation the world.

I established the Art and Technology Expression Center also known as ATEC in 2007, to give the students and faculty the environment for research in applying cutting edge technologies to their own art making. My goal here is to incubate artists and projects for demands of the next generation.

Furthermore, I built a remote visual studio at ATEC with

telepresense technology, which makes the study of high technology-based art expression possible. And I formed a new, innovative art education model which connects to the world's top art schools and performing sites with HD quality visual and auditory networks. This is essential to enhance effective regional remote communication.

Within ATEC, we have a telematic studio that is able to connect to anywhere in the world with high quality video and audio. That allows us to meet, exchange and collaborate with artists and art institutions throughout the world.

In 2009, we have set up our own telematic studio in New York, which in turn named CultureHub New York. Through this studio we are able to access one of the world's most important cities in the arts and culture. We followed that with the establishment of CultureHub Los Angeles in 2010. LA offers us access to a center of the media industry. Starting now, we would like to expand our global network with studios in various locations around the world.

Seoul Institute of the Arts has nourished many talented professionals in various fields of Korean arts, and this has been highly acclaimed by society, even including the government. Please tell us about the activities of alumni and the school.

Currently, Seoul Institute of the Arts is getting the spotlight with Hallyu [Korean Wave] throughout Asia.

In the last half century of Seoul Institute of the Arts has trained a great many artists who have gone on to succeed as professionals in their field of expertise. As Korean arts and entertainment have set its mark internationally, so have our talented alums.

I dare say that the Korean arts presently is being led by our alumni. They actively engage in various fields of art businesses including entertainment, theater, literature, fine arts, and media. Wherever you go, more than half of the working team graduated from Seoul Institute of the Arts.

Particularly in literature, most of our alumni started their career through annual literary contests that are often accused of causing "literary upheaval" or being from a "literature training academy." The Seoul Institute of the Arts is also renown in the fields of design, advertising and music.

In conclusion, Seoul Institute of the Arts won various awards as a professional art school which is critical in vocational education. Especially, the Korean Press Federation, which supervises the True Education Award, selected our school as a winner and praised us by saying that "Seoul Institute of the Arts has focused on art education and creative works for past 52 years since its establishment, for advancement of the Korean arts and cultures. With its practical education system which puts art education and creative activities together, it has greatly contributed to the growth of Korean cultures and its globalization."

This year, the Ministry of Education and Ministry of Culture, Sports, and Tourism reported their performances to Korea's President at the Seoul Institute of the Arts. President Park Geun-hye complimented the institute for its great contribution to the prosperity of the national culture.

Lastly, how do you see the future and vision of Seoul Institute of the Arts?

In brief, our school's motto can be summarized as "contributing to the national and worldwide nourishment of humanity through recreating our national arts and traditions but achieving global universality and independence at the same time." In essence, the purpose is to achieve global universality based on our national arts and traditions. From its establishment, Seoul Institute of the Arts has understood the importance of globalization.

As Seoul Institute of the Arts opens the next 50 years of its history, it will continue to play a crucial role to enlarge the artistic and cultural influences in all of society so, that society

moves towards another level.

Our ultimate vision is to be in the center of Neo Hallyu, or the new Korean wave, by spreading Korean artistic and cultural content worldwide, and I am sure that our alumni will continue to successfully promote the arts and culture of Korea.



Seoul Institute of the Arts received the "2014 Grand Prize" in the arts education category.

Who is Yoo Duk-Hyung?

Education

1963. Yonsei University, BA in English

1967. Trinity University, MA in Acting

1968. Yale University Graduate School Special Program in directing and combined stage

Career

1969 Head, Drama Center

1970 Principal, Seoul Acting School

1973 Representative of Korea, International Theater Institute General Assembly in Moscow

1974 Principal, Seoul Arts-Occupational Training College

1978 Dean, Seoul Arts-Occupational Training College

1984 Member of Building Committee, Seoul Arts Center

1985 Chief of Cultural Pre-Ceremony, Seoul Olympics Organization Committee

1994~ 2007.2. Head of Director, Dongrang Arts Center

1995 External Director, Seoul Arts Center

2000 Festival Planning Committee Member, Seoul World Cup Cultural Event

2007~ present. Chancellor, Seoul Institute of Arts

Awards

- 1975 Grand Prize in Arts, The 1st Cultural Award, Joongang Ilbo (Grass Tomb)
- 1980 Grand Prize and Director's Prize, The 16th Korean Drama & Film Arts Award, Hankook Ilbo (In the Hills and Fields, When Spring Comes)
- 1981 Director's Prize, The 16th Donga Drama Award, Dong-a llbo (In the Hills and Fields, When Spring Comes)

Cyber Warfare

Korea in Desperate Need to Nurture, Secure Cyber Security Warriors

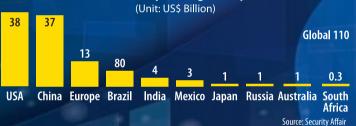
A year has passed since Edward Joseph Snowden, an ex-CIA agent, exposed the personal information collection activities of the National Security Agency (NSA). Concerns about cyber security expanded around the world, as cyber crimes cause firms and nations to wage digital war with one another.

As the government in each nation focus on protecting confidential information, damage among individuals and private companies is increasing rapidly. The Financial Times (FT) said in a recent report, "The height of 'cyber security horror' has reached its ceiling, as hackers easily break into computers of the government, firms, and individuals." The U.S. Securities

and Exchange Commission (SEC) has also revealed that 1,174 reports, 519 more than the same time last year, have been made by firms feeling threatened by cyber security problems. The target industries are diverse, from private banks, to energy and distribution companies.

The American distribution industry was attacked by hackers resulting in loss of personal info such as credit card details of 40 million customers and private addresses and contact information of 70 million customers. Neiman Marcus, a high-end department store, had 1.1 million sets of credit card information stolen, of which 2,400 were illegally used to steal

Costs for Prevention and Response against Cyber Crimes in 2013





money.

According to Security Affairs, a non-profit cyber security organization, US\$110 billion has been invested in preventing cyber terror worldwide. The FT stated, "We experience US\$2.8 billion to 120 billion annual economic loss rom company hacking activities in the U.S. alone."

The Center for Strategic and International Studies (CSIS) recently revealed that annual direct damages from hacking amount to US\$160 billion, and US\$445 billion inclusive of financial casualties from stolen intellectual property. The financial damage from stolen personal information due to exposed credit card information is US\$150 billion.

Fifteen percent of U.S. citizens (40 million) have had private information stolen, while 54 million people in Turkey have suffered major damages. Among other countries, over 16 million in Germany and 20 million in China were affected.

Additionally, CSIS stated that cybercrime negatively influenced commerce, industrial competence, and innovation.

Korea's Internet Environment Very Vulnerable to Cyber Attacks

During the cyber attacks on March 20 last year, Korea also suffered damages, causing a paralysis of computer networks in the broadcasting and finance industries. The nation was disturbed with a series of personal information leaks from financial companies this year as well. These instances had been a repeat of four major financial accidents in firms including Hyundai Capital back in 2011. Yet this predicament is getting worse instead of better.

The issue at hand is that hackers around the world are targeting Korea as a stopover destination. According to Korea Internet and Security Agency (KISA), 70 percent of worldwide Internet malware stops off at Korea's Internet. However, this is not due to the high rate of Internet service availability and electronic banking usage, but rather the fundamental problems of defective Internet security and OS/browsers with bad security.

"Korea has the fastest Internet access speed globally. However, Internet users are still adopting outdated security systems that hinder e-commerce and development," reported Financial Times (FT) addressing this matter on June 6. It added that Korean users are dependent on Microsoft Internet Explorer (IE) software, which has weak security.

This consequently caused malware programs to actively take over Korea's Internet, evidently inhabiting Korea as the location most appropriate for phishing and pharming experiments possible through malware seeding. The number of dotcoms doubled compared to last year, amounting to 850,000.

Training and Recruiting 'White Hat' Hackers throughout the World

Governments worldwide are swiftly proceeding with mat-

ters of reinforcing security as the scale of cyber attacks is growing.

The Department of Defense established the U.S. Cyber Command last year to take action against cyber terror. They plan to increase the number of their employees from about 900 to 4,900 in 2016. The U.S. Cyber Command has US\$447 million dollars to spend in 2014, twice as much as last year. This organization will take over defense tasks for national security as well as against cyber-attacks on private businesses.

Efforts are intensifying for training and recruiting "White Hat" hackers, who are experts in cyber security against malicious hacking. As openings in government organizations such as the NSA, CIA, and FBI are increasing, Ivy League universities in the eastern U.S. are establishing new courses on computer security-related programs. Fortune magazine stated, "New employees of the cyber defense industry with a bachelor's degree will receive a starting salary of US\$88,000 to US\$100,000."

India increased cyber security professionals to 5,000, assigning them to six government organizations. Some government organizations in Russia, China, and Iran are even scouting out IT experts working in U.K. governments and businesses.

Korea has also suffered from various hacking incidents. As national cyber security is exposed to a high risk due to cyber-attacks, calls for cyber security recruitment and training are rising.

Under the circumstances, chances for future cyber warriors to learn working knowledge and knowhow from top experts in information security have been arranged, attracting interest from students who wish to be security specialists.

Best of the Best (BoB), a training program for future leaders of cyber security, recruited members of their 3rd trainees class until June 11 to educate top candidates to take action against cyber terror. An alarming number (1,080) applied to take part in this program where only 120 trainees are taken, over twice as much as last year. The security education program was hosted by the Ministry of Science, ICT and Future Planning, and managed by the Korea Information Technology Research Institute (KITRI).

Yoo Jun-sang, president of KITRI, is seeking 100,000 cyber security personnel. He said, "As BoB fosters key talents in future national cyber security and seeks to lead the information security industry, we are striving to establish thorough theories and preparation training of the newest security trends and high-end technology."

In the meantime, colleges, including Korea University and Joongang University, are establishing cyber security-related majors in a similar manner. According to the Korea Internet Security Agency (KISA), there is a shortage of information security manpower, as 2,000 to 3,000 jobs cannot be filled. Demand can only increase as well, as financial authorities and banks plan to establish a customer privacy center to reinforce information security.





Students listen to a lecture on the newest trends in IT security.

Research Institute (KITRI) is a special public institute that was established in 1985 for the research and development of cyber-security technology and training of IT-security human resources under the Ministry of Trade, Industry and Energy (MOTIE).

When Dr. Yoo Joon-sang was appointed as the ninth president of KITRI in 2010, he first noticed that South Korea was very vulnerable to cyber threats, and needed to take immediate actions to defend the nation. So, he declared the need to train cyber-security specialists as the first project to execute. He called it the Best of the Best (BOB), a cyber-security leader training course which offers basic knowledge on information security, simulated cyber-terror defense mechanisms, cyber-forensic cases, and virtual consultant internships. This project has now expanded to training young high school and college students and even chief information security officers (CISOs) who will be given the authority to make decisions on security issues that require immediate attention. The course is designed as a survival game and awards 20 million won (US\$18,500) to winners. BOB has already received spotlights not only domestically, but also globally via CNN, SC Magazine, AFP, and Sky News.

In March this year, KITRI held the second authentication ceremony to award ten winners in the survival game conducted as the second BOB training program. A total of 480 white hat hackers applied for this program, and 120 were selected as contestants. They went through an eight-month training program in two phases, learning core technology and knowledge and testing what they have learned through simulations. The winners received a chance to work or study at their desired places. They had a choice between going to school, starting a business, getting a job, or serving in the military with advanced benefits. Also, they get to meet periodically to exchange information and widen their network. In the first BOB training, KITRI had released 60 trainees. This year, the number of trainees doubled.

On March 20, 2013, 32,000 PCs

were infected with a Trojan horse virus. Not knowing where the virus came from, information security companies that analyzed the situation came up with different theories about the attack. As if proving that the solution given at the times was insufficient, the nation was again cyber-attacked three months later in a similar way on June 25. The Ministry of Science, ICT and Future Planning (MSIP) then ordered KITRI to expand its information security training. That is how KITRI doubled the number of students for the second BOB training class.

Due to the high-speed Internet environment, South Korea's IT industry has grown, and is still growing at an incredible speed. Just a few months ago, Vice President Mitchell Bell from Marvel Studio said it chose South Korea to shoot some of the scenes for its film "Avengers 2" because it is well aware how influential South Korea can be when it comes to online promotion. Marvel Studios was looking to use over 10 billion won (US\$9.8 million) to shoot the scenes in South Korea and earn back 25.1 billion won (US\$24.6 million) in return. It was also considering the intangible financial benefit of over 2 trillion won (US\$1.96 billion) in online promotion by choosing South Korea.

But, like all things that grow up too fast, there is always a side effect. For overlooking the significance of information security in exchange for speed, South Korea became a fat target for cyber attacks. When broadcasting companies and banks like KBS and Shinhan Bank fell under attack on March 20, 2013, the Korea Communications Commission (KCC), National Cyber Security Center (NCSC), Korean National Police Agency (KNPA), and Korea Internet & Security Agency (KISA) quickly gathered and made up a cyber threat cooperative response team. However, they were not able to find out how the attack was made, and ended up concluding that they "assume" that the virus spread while updating servers. A week before the incident, many specialists already predicted the attack and warned that the virus was spreading, and even North Korea brought up the possibility of cyber terror. But the government, broadcasting companies, and banks all ignored the alarm.

The only way Yoo thinks that they can prevent cyber attacks from repeating is to train the next generation of cyber security leaders the right way. KITRI has formed MOUs with many IT-related companies and institutions to teach students better. It has signed a contract with Symantec Korea, Blue Coat Korea, and Hancom to train the next generation of information security leaders, and SK Infosec, Wins, and Korea University Protection Information Department (KUPID) to train CISOs. To utilize the graduates, it made a cooperative alliance with the Ministry of National Defense (MND) and MSIP.

The people who are already in the IT industry have already lost faith in their jobs. The working condition is terrible due to overtime, low pay, and disorganized information. Many have already left the job, gone abroad to study or get a job, or changed their careers. To end this vicious pattern, the entire IT environment needs to be overhauled, and the only way to do this is to prevent the next generation from going through the same thing the previous generation went through.



President Yoo Joon-sang listens to a special lecture on IT security trends at the second BoB opening ceremony held on July 1, 2013.

Dr. Yoo stressed, "The fundamental solution is to make a control tower exclusively for cyber security under the National Security Council (NSC)." As of now, institutions like KCC, NCSC, and KISA are in charge of their own information security, so currently there is no integrated body that takes charge of all information security issues that happen in the nation. He continued, "This will slow down the response when cyber attacks actually occur, and the consequences can be critical. Also, the head of the control tower should not only be given responsibility, but authority as well, so that he or she may take actions quickly before the problem spreads further."

This is not the first time Yoo had expressed his opinion about the importance of cyber security. When he became the chairman of the Economic Science Committee at the National Assembly in the late 1980s, he requested an increase in budget for science technology and even an organization directly under the President's command exclusively. He had already known the importance of information security even before IT technology started to be utilized in full swing. In 1994, the National Assembly's Intelligence Committee was established as he requested.

KITRI's current goal is to train 10,000 IT security specialists. According to the latest research Korea Statistical Information Service (KOSIS) compiled in 2012, there are approximately 360,000 companies in South Korea, but only about 40,000 companies pay attention to information security. President Yoo said, "There should be at least 10,000 information security specialists to make cyberspace safe from cyber break-ins," and, "Some people even assert that there should be one information security specialist for every company, which means we need to train 36,000 people, more than triple what we intended. That's a lot."

To demonstrate the importance of information security, KITRI held the K-BOB forum in February this year. Yoo had been appointed as the forum chairman. He said, "If cyberspace is in danger, the whole country is in danger," adding, "We should do everything we can to protect our cyber territory. We need to prevent accidents before they happen."

Dr. Yoo, who served four terms as a member of the National Assembly, is this time in charge of country affairs once again as a reassuring prop to nurture the nation's next-gen cyberspace security specialists.

Best of the Best

Program to Nurture Next Generation of Security Leaders on Track

As information security is increasing in importance over time, the Korea Information Technology Research Institute (KITRI) took a very big step to nourish Korea's next generation security leaders in 2012. They aim to find talented youth, and ultimately make them so-called "white hat hackers."

Since July 5, 2012, KITRI has been operating its next-generation security leaders program "Best of the Best" every year.

The Best of the Best program is designed to grow highly-trained information security professionals who can enhance the competitiveness of Korea's information security industry, and ultimately contribute to building a strong national security system against international cyber terror. Many actual field workers, including ex-white hat hackers, current security professionals, and police officers specialized in cyber investigations are invited as mentors in order to deliver their actual know-how and nourish participants to become practical security professionals with the right insight to the country as well as creativ-

Participants of this program include college students (or graduates) and high

school students who have won hacking contests or been recommended by each school. They also take written examinations and in-depth interviews with a competition rate of 100:1. Finally, after two months of survival training, approximately ten individuals from digital forensics, security consulting, mobile security, convergence security, and cloud security are selected. The final ten receive a Best of the Best certificate from the Ministry of Science, ICT and Future Planning.

The BOB program consists of 6 months of basic education and experience-based courses and two months of project acceleration courses. The advanced curriculum brings in top international security professionals to teach global security trends and security technology. All the courses are taught on a group basis, either entire or mentoring. Advisory and mentoring panels with Korea's top information security professionals evaluate each participant and choose survivors. At each stage, project capability tests and cyber war preparation tests are given.

KITRI starts the 3rd BOB program on July 10, 2014 after the 1st in 2012 and the 2nd in 2013. This time, a total of

1,080 people applied, and the competition rate reached 9:1.

Especially, many talented individuals who made it into DEFCON, the world's top hacking contest, or other domestic and international hacking contests and IT contests applied. People who gave presentations at the security weakness analysis conference (16 percent) and have security-related thesis or patents (7 percent) also applied.

By age, people older than their 20's account for 74 percent. Teenage applicants are 26 percent, pointing out that teenagers are becoming more interested in information security. Eighty-three percent are males, and 17 percent are females. But female applicants increased by 7 percent from last year's 10 percent.

The excellence of the BOB program, renowned domestically as well as internationally, induced many people to apply. An official at KITRI said that the superiority of the BOB program which includes 1:1 practical coaching, Korea's top professional networks, and survival auditions has become very popular both domestically and internationally for the last 2 years. The official also mentioned that competition this year will be much more intense than any other time.



KITRI has particularly high expectations about this year's talented applicants. It is preparing a stronger and more effective program based on previous years' know-now. KITRI improved education facilities, expanded support for non-Seoul residents, and intensified the evaluation criteria and applying rules.

KITRI has been promoting various career programs linked to military service, start-up companies, schools, and jobs so that BOB winners could actively engage in the information security field as next-generation leaders. In addition, KITRI has been funding participants' technology training and social contribution activities by creating a security technology association. This association provides free consulting to securityvulnerable people such as small companies, analyzes security weaknesses with other organizations, participates in international contests, and gives technology lectures.

Yoo Joon-sang, president of KITRI, said that security professionals will be needed by every industry. He claims that information security is a brain war, and that to win that war, all we need is one good professional who can block attacks from a million hackers. He is always trying to find a better way to gather many talented individuals. He also added that he will create a sustainable human resources program that can manage all BOB participants over time.

Right after president Yoo took office at KITRI, he started BOB, insisting on "having 100,000 security professionals on stand-by." Beginning from the 1st BOB program in 2012, he is operating 3 information security professional programs including Chief Information Security Officer (CISO). Certified students are performing very well domestically and internationally in the IT industry. Some of them won information security contests by analyzing and reporting the security weaknesses of IT products and services. KITRI will officially become a "security professionals' academy" based on the performances and education systems so far.



BOB students are listening to a lecture from a world-famous security professional.

Welcoming Ceremony of the 3rd Best of the Best Program

When 15:30-17:30, July 10, 2014 (Thursday)

Where Main Conference Room (B1) of Korea Science and Technology Center

Hosts Ministry of Science, ICT and Future Planning / Korea Information Technology Research

Institute (KITRI)

Supervisor Korea Information Technology Research Institute (KITRI)

Attendees Members of National Assembly, Vice Minister of Science, ICT and Future Planning,

Professionals from Academia and Industry, Advisory and Mentoring Panels of BOB, 1st,

2nd, 3rd BOB Participants, Participants' Families (around 300)

Agenda

Time	Contents	Notes
15:30-16:00	Registration	Arrival of guests and welcoming speech
16:00-16:10	Introduction on Attendees and Special VCR	Opening VCR, opening announcement, pledge of allegiance
16:10-16:20	Welcoming Speech and Performance Report	President of KITRI
16:20-16:35	Congratulatory and Encouraging Speech	VIPs
16:35-16:45	Appointment of the 3rd BOB Participants and Mentors	Appointment of the 3rd BOB participants and mentors (representatives)
16:45-16:55	Special Events	Preparation of events that are appropriate for education and can enhance information security alert
16:55-17:00	Photography	VIPs, representative from advisory and mentoring panels, 3rd BOB participants
17:00-17:30	Special Lecture	(Plan: Ministry of Science, ICT and Future Planning)
17:30 -	Closing Ceremony	

Changed Economic Optimism

BOK Fixed Base Rate at 2.5% for 13 Months in a Row, Giving Up Optimistic View on Economy



Bank of Korea Governor Lee Ju-yeol presides over the third Monetary Policy Meeting since his inauguration on June 12.

The central bank of Korea renounced its optimism about the recovery of the Korean economy amid increasing uncertainties both at home and abroad.

The dampened consumer and investor sentiment and increasing volatility in the value of the Korean currency were mentioned as two of the major risks of the Korean economy at the Monetary Policy Committee meeting held on June 12. These are key variables on which domestic demand and exports depend. The atmosphere of the meeting was quite different from last month, when Bank of Korea governor Lee Ju-yeol said that the base rate was likely to be adjusted upward.

As far as economic indices are concerned, today's Korean economy is characterized by good export performance and extreme shrinkage in domestic demand. However, the export side is also increasingly threatened these days by the rapid appreciation of the won as of late. The central bank governor also spent much time explaining the negative impacts of the strong won during the meeting.

This has led to some change in monetary policy. "The possibility of the base rate increase mentioned last month was based on the monthly economic forecasts for April, and the central bank takes into account overall economic and financial conditions following foreign exchange fluctuations, rather than the specific level of the exchange rate, in making monetary policy decisions," he said, adding, "Some unintended side effects

could arise when interest rate policy is used to cope with foreign exchange fluctuations, which are determined by the supply and demand." He continued, "It is true that many economic indices are deteriorating nowadays, including those relating to consumption and service-industry production, and we are now watching whether the Sewol ferry disaster will be only temporary or long-lasting to cause a change in monetary policy."

He also mentioned that he would reflect a series of changes that occurred in May and this month to the central bank's economic forecasts to be available next month. At present, the Bank of Korea is estimating the annual national economic growth rate at 4.0 percent. However, the Korea Development Institute (KDI) has recently adjusted its forecast downward from 3.9 percent to 3.7 percent, and the World Bank cut its estimate by 0.4 percentage points to 2.8 percent, too.

In relation with Sewol ferry disaster, Harvard University professor Robert Barro said at the BOK Conference 2014 held recently in Korea , "The recent Sewol ferry disaster is not a rare macroeconomic disaster such as World War II, the Korean War, or the Great Depression," he mentioned, adding, "This means that the government does not have to intervene, although the catastrophe is likely to have a temporary impact on consumption." A rare macroeconomic disaster can be defined as an event for which the GDP falls by at least 10 percent.

At the conference, there was emerging an opinion that the aging society could decrease Korea's annual economic growth rate by 0.87 percent per year. Another Harvard University professor David Bloom said at the BOK Conference 2014, "The number and ratio of people at the age of 60 and older to the international population is estimated to increase from 760 million to two billion and from 11 percent to 22 percent each between 2010 and 2050," said, adding, "The population structure of Korea contributed to raising its annual average economic growth rate by 2.01 percent from 1965 to 2005, but is likely to lower the rate by 0.87 percent between 2005 and 2050." He continued, "Still, the negative effect of an aging society can be alleviated if a labor market reform follows in the form of extended retirement age, women's greater participation in economic activities, and an overhaul of pension systems."

Moody's Rosy Prediction

Meanwhile, Moody's predicted that Korea's GDP would



grow 3.8 percent in each of 2014 and 2015. The leading international credit rating agency published a report on June 9, saying that Korea's economic fundamentals are still robust despite the negative factors such as the Sewol ferry disaster and the massive debts of state-run enterprises and households.

Moody's explained in the report that the Korean economy has been on a recovery track since 2012 thanks to its high export competitiveness and the government's economic stimulus packages that have more than offset the appreciation of the won and increase in gross fixed capital formation. "Korea, which has been relatively less affected by the Fed's quantitative easing policy and other external uncertainties, is one of the safe havens for global investors as of now," it said.

The agency added that the Korean economy would be able to get another breakthrough, in the service sector in particular, if the government's three-year plan for economic reform turns out to be successful. "Korea's per-capita GDP based on purchasing power parity is likely to surpass those of Japan and France in 2018 assuming a successful economic structural reform," it continued.

Still, Moody's did not forget to mention the excessive debts on the part of public enterprises and households and the temporary shrinkage in domestic demand as two of the short-term factors inhibiting further growth. It also pointed out that the problems associated with the population structure could limit the country's potential growth rate in the longer term although Korea is expected to tackle such problems effectively and efficiently. "The Park Geun-hye administration's efforts for the reduction of liabilities and structural reform will be the key, along with a recovery of the global economy, in Korea narrowing its gap with more advanced countries," it explained.

Prior to the publication, Senior Vice President of Moody's Tom Byrne predicted that Korea would join the ranks of advanced economies in 2018. According to Moody's, Korea's credit rating is AA3 with a stable outlook.

At a press conference held in Seoul on May 28, he said, "Korea is maintaining its industrial competitiveness very well in spite of the currency appreciation pressure, and is likely to catch up with France in terms of purchasing power and percapita GDP in 2018."

Amid concerns over deteriorating profitability due to the recent appreciation of the won, the senior vice president still pointed out that the enhancement of industrial competitiveness matters more than the concerns.

"Korea's export performance is somewhat worsening nowadays due to the decreasing demand from advanced economies," he added, "However, this is unlikely to pose a significant problem, because Korea's competitive edge is still sharper than that of other countries." He continued, "Japan could not increase its exports to a large extent during the past year, despite quantitative easing and the subsequent depreciation of the yen, which means Korea is outperforming Japan when it comes to industrial competitiveness."

"Korea is showing fiscal soundness for now, but private consumption is on the decline due to high household debt, and also problematic are the potential deterioration of the fiscal conditions and the decreasing export demand for the global economic recession," he explained, warning, "Some burden may be imposed on the government in a case when public funds have to be injected due to an increase in contingent liabilities or insolvency in the banking sector." He also remarked, "As far as I know, the Korean government and the National Assembly have had in-depth discussions about how to reduce the debt ratio of state-run enterprises, and the credit rating of Korea will be further improved if the plans are in progress as desired."

He predicted that the North Korea risk would be a minor factor in Korea's credit rating because little change is in sight. "In the past year, the tension between the two Koreas has shown no signs of surging, and the possibility of the collapse of the regime has remained as it is, which means there is enough room for the improvement of South Korea's economic fundamentals unless the balance of power is broken, or provocative actions are taken by the North," he said, emphasizing, "In addition, a very positive effect will be available if the South takes a leading role in peaceful reunification of the two Koreas."

Management Dilemma

Major Korean Chaebol Having Difficulties in Setting up Business Plans for H2







KUMHO ASIAN









Samsung has not announced its official group-wide investment plan since last year, which is quite contrary to its announcement of investment and employment plans each year with the only recent exception in 2009. The LG Group, which promised the largest investment in its history last year, has yet to come up with investment and employment plans for this year, too. Things are not much different in the rest of the 10 major business groups, either.

Their conservative and low-profile positions have much to do with the harsh business conditions as of late. In particular, slow domestic demand is becoming permanent, and the appreciation of the won has affected their export competitiveness and profitability, adding to their concerns over the second half of this year. According to FnGuide, the Q1 sales of 119 listed subsidiaries of the 20 major business groups in Korea increased by 0.53 percent between 2013 and 2014, but the quarterly operating and net profits dropped by 3.22 percent and 1.96 percent, respectively.

The companies listed on the KOSPI suffered a decrease in profitability and

operating profits during the first quarter of this year, in spite of some quantitative growth. According to the Korea Exchange and the Korea Listed Companies Association, the consolidated Q1 performance of the 502 KOSPI companies settling accounts in December and announced on June 2 that their combined sales recorded a 1.19 percent growth year on year to 458.4409 trillion won (US\$447.4383 billion). However, the operating profits fell 1.48 percent to 25.7976 trillion won (US\$25.1785 billion). The net profits of the companies increased 4.57 percent to 19.1628 trillion won (US\$18.7029 billion) and the net profit-to-sales ratio went up by 0.14 percentage points to 4.18 percent. In particular, Samsung Electronics' operating profits decreased by 3.31 percent from a year earlier. But those of Hyundai Motor Company, Kia Motors, and Hyundai Mobis showed marginal positive operating profits. The ratio of the top 10 companies in terms of operating profits rose from 62.69 percent to 65.58 percent during the period.

To compound the matter, the outlook for the second half is getting worse

as the strong won is likely to continue during the period. Woori Investment & Securities has recently estimated that the annual net profits of KOSPI-listed companies would be decreased by a couple of trillion won in the event of a 2 percent or higher drop in the won-dollar exchange rate.

An increasing number of corporations are reexamining their existing business plans and trying to recover their profitability through cost reduction amid such high uncertainties. "Not only the ongoing currency appreciation but also the recent signs of slowdown of the growth of emerging economies such as BRIC are driving Korean companies to renew their marketing and production plans," said senior researcher Ju won at the Korea Economic Research Institute.

POSCO announced on May 19 that it cut its annual investment for this year from 6.7 trillion won (US\$6.6 billion) to 5.6 trillion won (US\$5.5 billion) on a consolidated basis. The purpose is to focus more on sharpening its competitive edge in steelmaking, the root of the corporation, rather than launching new businesses.

The Hyundai Motor Group is modifying its business plans for foreign exchange rate fluctuations, too. One of the examples is the decision to build a new Kia Motors plant in Mexico. The group is seeking to cut costs by means of more overseas manufacturing facilities in the middle of the weak yen and strong won trend as of late.

Samsung Electronics, in the meantime, discusses how to enhance its profitability and address its high dependency upon the profits earned by the mobile phone business unit during the global strategic consultative meeting scheduled for three days from June 25. In Q1 this year, Samsung Electronics' operating profits fell 3.31 percent from a year earlier.

The groups' efforts for higher profitability inevitably entail significant cost reductions and retrenchment. This, in turn, cannot but result in shrinking investment and less employment. In fact, these concerns are becoming the reality nowadays. According to market research firm CEO Score, the top 30 groups' 174 subsidiaries recorded combined sales of 20.513 trillion won (US\$20.179 billion) in Q1 this year to show a 8.8 percent growth from the preceding year, but total investment by the 29, excluding the Samsung Group, decreased 4 percent during the same

period.

It also pointed out that the government has to assume a bigger role under the circumstances. "Ongoing foreign exchange risks such as the appreciation of the won and the depreciation of the yuan leave no option for Korean companies but to increase overseas production, as their Japanese counterparts did, for cost reductions," said senior researcher Lee Ji-sun at the LG Economic Research Institute, continuing, "Since this could lead to a decrease in employment rate and industrial hollowing-out, the government has to step in aggressively for deregulation and exchange rate management." @

Conglomerate Investment

Investments of 30 Major Chaebols Up 9% to Over 20 Trillion Won in Q1

The 30 major business groups in Korea increased their investment by approximately 9 percent from a year earlier to 20.5 trillion won (US\$20.1 billion) in the first quarter of 2014. Still, the total investment decreased by 4 percent when the Samsung Group, the sum of which soared by as much as over 48 percent during the same period, was counted out. That of the 25 groups excluding the top five fell by 13 percent, too.

According to the data published by CEO Score on June 8, the 174 listed subsidiaries of the 30 major groups, excluding financial companies, invested a total of 20.513 trillion won (US\$20.144 billion) in Q1 this year, which is 8.8 percent higher than the 18.85 trillion won (US\$18.51 billion) of a year ago. Non-capitalized R&D costs such as ordinary research and development expenses were excluded from the calculation.

Their investment in the acquisition of tangible assets such as manufacturing facilities jumped 13 percent from 16.4 trillion won (US\$16.1 billion) to 18.5 trillion won (US\$18.2 billion), while that in the acquisition of intangible ones declined by 3.4 percent from 2.05 tril-



The corporate headquarters of several of the most well-known conglomerates, or chaebol, in Korea.

lion won (US\$2.01 billion) to 1.98 trillion won (US\$1.94 billion).

The Samsung Group's investment showed a sharp increase in just a year from 4.6 trillion won (US\$4.5 billion) to 6.83 trillion won (US\$6.71 billion). Samsung Electronics accounted for more than 90 percent of the sum by investing 6.2 trillion won (US\$6.1 billion), which was divided into 3.3 trillion won in semiconductor facilities and 700 billion won in displays.

The SK Group's investment increased 47.5 percent to 2.79 trillion won (US\$2.74 billion). SK Hynix increased its investment by over 700 billion won to 1.3 trillion won (US\$1.2 billion) to replace old equipment for the manufacturing of new memory semiconductor products.

The LG and Hyundai Motor Groups invested 2.7 trillion won (US\$2.65 billion) and 2.2 trillion won (US\$2.1 billion) in Q1, respectively. Each of the groups recorded a year-on-year rate of decline of 12 percent.

In the meantime, KT's quarterly investment leaped 59.5 percent to 1.2 trillion won (US\$1.1 billion) and Lotte's increased by 15.5 percent to 530 billion won (US\$520 million), whereas POSCO and CJ showed a rate of decrease of 47.5 percent to 1.19 trillion won (US\$1.16 billion) and 24.5 percent to 460 billion won (US\$451 million) each. The Hanjin Group increased its sum by 14.1 percent to 313 billion won (US\$307 million) while Hyundai Heavy Industries' fell 2.8 percent to 310 billion won (US\$304 million).

The ratio of the Samsung Group's investment to the total of the top 30 amounted to 33.3 percent in the first quarter, 8.9 percentage points higher than in the same period of last year. The total investment by those excluding Samsung declined 4.0 percent from 14.2456 trillion won (US\$13.9891 billion) to 13.6807 trillion won (US\$13.4344 billion).

Goodbye Industrial Capital

Private Equity Funds Opening New Chapter in Capitalism

The type of corporate ownership in Korea is changing these days. In short, industrial and financial capitalism is waning, while private equity funds (PEFs) are waxing.

According to the statistics of the Emerging Market Private Equity Association (EMPEA), the penetration ratio of local private equity firms, defined as their investment to the GDP, was 0.28 percent last year. The percentage had been 0.20 percent in 2012.

The private equity penetration ratio of Israel fell from 1.74 percent to 1.62 percent in the same period. Also, India (0.19 percent to 0.20 percent), sub-saharan Africa (0.09 percent to 0.12 percent), Poland (0.06 percent to 0.11 percent), and South Africa (0.04 percent to 0.06 percent) showed a growth in the ratio during the period. This trend is contrary to the United States (1.03 percent to 1.02 percent), Britain (1.04 percent to 0.89 percent), Brazil (0.20 percent to 0.13 percent), China (0.09 percent to 0.07 percent), Japan (0.09 percent to 0.04

percent), Turkey (0.04 percent to 0.03 percent), Russia (0.06 percent to 0.01 percent), and the Middle East and North Africa (0.05 percent to 0.01 percent).

Private equity funds were introduced to Korea 10 years ago. However, their reputations are still not that good, because they bought major corporations in Korea at dirt cheap prices during the 1997 Asian financial crisis and sold them back for huge profits.

Still, the perception is changing nowadays. Private equity funds are increasingly acting as catalysts for industrial structure reform and corporate restructuring based on M&As.

MBK Partners and the Bogo Fund, two of the leading PEFs, are distinguishing themselves in particular. Last year, MBK Partners obtained approval from the government to acquire the Korean corporation of ING Life, the fifth-largest life insurance company in Korea, to be comparable to the 11th position on the list of local big businesses. Bogo Fund, in the meantime, took over Tong Yang



Securities, and the consortium of STIC Investment and Hana Daetoo Securities purchased 49 percent of the shares of defense company LIG Nex1.

The execution of investment is on the rise, too. A total of 237 PEFs were in business in Korea as of the end of last year, when the amount reached 9.3 trillion won to hit a new high.

The future outlook is very bright as well. The size of domestic pension funds is expanding rapidly along with the ratio of alternative investments such as PEF-based investment. Last year, the National Pension Service's alternative investment amount broke the 40 trillion won (US\$39.2 billion) mark. The NPS is planning to increase the ratio of alternative investment to at least 10 percent by 2019.

Still, concerns are rising at the same time over risk management. The average number of employees of the PEFs is just 20 to 30, but they have to cover a wide variety of business types and corporations.

Net Capital Ratio

NCR Deregulation Expected to Facilitate Asset Management Firms' Overseas Business

Rorean asset management firms are expected to make inroads into overseas markets with greater ease as the Financial Services Commission has opted to repeal the net capital ratio (NCR) regulations on them.

The asset management industry insisted on the abolishment of the restriction over and over, mentioning that the NCR regulations were too excessive for asset management firms, in view of the absence of systemic risks in them, unlike in securities companies.

They also claimed that their overseas market penetration was restricted due to the NCR prohibition by the deduction of investment shares from the net capital, and that overseas investment would be boosted once the regulations are repealed because the firms do not have to maintain capital to meet the minimum NCR then.

Korea's fund market is approximately 345 trillion won (US\$339 billion) in working capital, which is the 12th or 13th largest in the world. Although the



total amount is quite large, the rankings of individual asset management companies are rather low.

At present, Mirae Asset Global Investments, Samsung Asset Management and Korea Investment Management are running overseas subsidiaries in Hong Kong. Mirae Asset has a subsidiary in Brazil, too. Hanwha Asset Management is planning to set up a joint company in China.

The deregulation regarding the NCR determined at this time is expected to result in M&A between such firms and the foundation of large asset management companies comparable to those in advanced economies.

Foreign Liabilities

Foreign Liability Balance of Korea Totaled US\$425.4 Billion at End of March

The Bank of Korea released the International Investment Position (IIP) report for March on May 21 and announced that the foreign liabilities balance increased by US\$9.2 billion to US\$425.4 billion between December last year and March 2014.

The short-term liabilities maturing within one year increased by US\$8.5 billion to US\$123.8 billion due to the increase in foreign currency borrowing by banks. The ratio of the short-term debts to total liabilities went up from 27.7 percent to 29.1 percent during the same period as well to hit a new high since June last year, when the percentage was 30.0 percent. The ratio of short-term liabilities to the foreign exchange reserve as of the end of March was 34.9 percent, 1.7 percentage points higher when compared to the end of December 2013.

The ratios rose for the first time in seven quarters. Long-term liabilities increased by US\$700 million to US\$31.6 billion.

In the meantime, foreign credit totaled US\$616.5 billion, showing 2.4 percent growth mainly in central bank reserve assets and securities investments. The net external credit, cal-



culated by subtracting external liabilities from foreign credit, increased by US\$5.4 billion to US\$191.1 billion.

"The increase in the ratios is likely to be temporary, caused by the base effect, but it is also necessary to monitor whether it will continue for a while or not," said the Ministry of Strategy and Finance, adding, "Most of the indices showing foreign payment capabilities and external soundness are still solid though."

The overseas investment balance rose US\$22.4 billion to US\$986.6 billion, US\$10.2 billion of which was securities investment. The foreign investment balance, on the contrary, fell by US\$5.8 billion to US\$990.9 billion as the direct investment and securities investment declined by US\$3.7 billion and US\$7 billion each, to more than offset the increase in bank loans.

Yuan Currency Swap

Korea-China Currency Swap Employed for Trade Settlement for the First Time

Hyundai Motor Company asked the Bank of Communications of China to provide an accounts receivable loan worth 124.72 million yuan (US\$20.01 million) for its cars exported to China.

This is the first case in which a Korea-China currency swap is employed for yuan-based trade settlements and a Chinese bank has used the currency swap agreement for big business in Korea. The bilateral financial exchange based on the currency swap is expected to expand through the state visit of President Xi Jinping to Korea.

According to industry sources, the Bank of Communications of China provided the US\$20 million loan by procuring it from a currency swap of US\$56 billion, which is equivalent to 360 billion yuan.

The replacement of the payment currency by Hyundai is to hedge its foreign exchange risk through the diversification of settlement means. These days, the yuan is emerging fast as a key currency, posing a threat to the U.S. dollar.

FX Reserves

Foreign Exchange Reserves of Korea Reach New High

Korea's foreign exchange reserves reached an all-time high again, for the 11th consecutive month.

The Bank of Korea announced on June 5 that the foreign exchange reserves increased by US\$5.07 billion from the previous month to US\$360.91 billion as of the end of May. The recordbreaking streak has continued since July,

when the amount had totaled US\$329.71 billion.

The increase recorded last month can be attributed to a rise in foreign asset yields. Specifically, marketable securities such as government bonds and corporate bonds, which account for 91.5 percent of the reserves, increased US\$4.08 billion to US\$330.11 billion.



Deposits, in the meantime, went up by US\$1.08 billion to US\$20.07 billion (5.6 percent of the total) and the IMF SDR declined US\$20 million to US\$3.49 billion (1.0 percent). Korea ranked seventh in the world in foreign exchange holdings at the end of April. ®

Transfer of Computer Centers

Citibank Korea Moves Corporate Customer Information Abroad for Integrated Management

The Korean financial authorities have 📘 allowed Citibank Korea to transfer its customer information out of the country, an unprecedented move that has focused a lot of attention on the other foreign financial companies' decisions. Until recently, they intended to manage customer information with the headquarters through cross-border consignment contracts, but have repeatedly failed to obtain the permits from the authorities for the possibility of improper management. However, an increasing number of foreign financial firms are expected to move their customer information abroad down the road.

The approval for the transfer of computer centers was given during the regular meeting of the Financial Services Commission on May 21, and Citibank Korea will accelerate the relocation of its corporate client information. "The transfer and integrated management of customer information covers only corporate clients for now, and nothing has

been determined as to whether the same policy will be applied to general customers," the bank explained.

The approval is to follow the related provisions stipulated in the KORUS FTA and the Korea-EU FTA. According to the relevant clauses, the Korean government has to let foreign banking firms send their customer information to the headquarters and third parties for commissioned management. At present, many such firms run their own computing centers in Hong Kong, India, Singapore, and the like to manage the information of their customers in the Asia-Pacific region. This can result in reduced expenditures in IT systems and some synergy effects in sales and marketing.

The case of Citibank Korea is likely to lead to an increasing number of similar requests from foreign financial companies in Korea. In fact, they have already repeated such calls for the higher efficiency of customer information management and global asset manage-



ment. The examples include SC Bank and life insurance companies such as Allianz, Prudential, AIA, MetLife, and ING.

It is also pointed out that the supervision of the data could become loose due to the cross-border transfer and the general public could be hostile to the change in the wake of the series of recent information leakage accidents. "The data to be transferred by Citibank does not include sensitive or personal information such as resident registration numbers but is limited to corporate information," said the government, adding, "We will continue to apply strict rules to the information management even after the permission of the data transfer."

Maintaining Presence

Standard Chartered Bank Korea to Not Withdraw from Korean Market

A jay Kanwal, president of Standard Chartered Bank Korea, dismissed the rumors about SC Bank's withdrawal from the Korean market by stressing the importance of the market. He was appointed as the president of SC Bank Korea on April 1.

"On the very day of my inauguration, Korea was arranged as the SC Group's headquarters overseeing the Northeast Asian markets including Japan and Mongolia," he said during the May 29 press conference at the Plaza Hotel in Seoul, adding, "The decision reflects the strategic standing and significance of the Korean market." The president is

serving as the CEO of the regional head-quarters, too.

He denied the rumors about the withdrawal as well. SC Bank Korea has reduced the number of its branches due to deteriorating profitability since last year and has moved to dispose of some of its subsidiaries such as SC Capital and SC Savings Bank. This has resulted in such rumors.

"I am sure that the SC Group is going to do its business in the Korean market for a long period of time," he explained, continuing, "It is in this vein that Korea has become the regional headquarters." He also remarked that



the group has no additional merger plan at all except for the consolidation of 50 local branches by the end of this year.

The president also showed his will to focus on information technology. "Korea is a global IT powerhouse and SC Bank will make the most of its IT infrastructure to provide the world's finest smart banking and digital banking," he said, "We are currently analyzing what is the most suitable digital banking model for the Korean market and I expect that the answer would be the co-presence of digital and physical services."

Buy Korean Stocks

European Money Poised to Return to KOSPI, But Increasing Risk

Foreign investors' net buying in the Korean stock market is expected to continue for a while, with the recent decision of the European Central Bank (ECB) to cut the base rate and better-than-expected economic indices in China. The ECB decided to cut the benchmark rate from 0.25 percent to 0.15 percent on June 5 (local time). The deposit interest rate fell to -0.10 percent, and the liquidity absorption measures are put on hold, too.

Experts are predicting that the index will be able to break the 2,050 point mark with a new upward momentum given by European funds, which were out of Korea for a couple of months. European investors pulled out of the Korean stock market one after another. They net-sold 850 billion won (US\$830 million) worth of shares even in April, when the appreciation of the won led to a buying trend. This was

quite contrary to the net inflow of U.S., Chinese and Japanese funds recorded during the same period.

Most local stock firms are estimating the upper limit for June at 2,070 to 2,100 points. Even the most conservative ones like Daishin Securities and Eugene Investment & Securities have suggested 2,050 points.

The Korea Composite Stock Price Index (KOSPI) has been moving around over 2,000 points up to recently since breaking the 2,000 point mark on April 10 for the first time this year by the closing at 2,008.61 points.

Foreign investors have bought Korean stocks worth a total of 5.4299 trillion won (US\$5.3338 billion) since then. In particular, the net buying has continued for about 20 trading days since May 13 and has been showing signs of further expansion after the announcement of the ECB.



"The amount of net buying by foreign investors is likely to go up from 5.5 trillion won to over 10 trillion between now and the near future in view of the similar precedents," said a market source.

However, the consensus is that the movement will be reversed from June as some weak euro policy against deflation was adopted at the ECB Monetary Policy Meeting on June 5. "Anticipated examples of the new expansionary monetary policy include negative deposit interest rate, long-term refinancing operation for small firms and ABS purchase, which are somewhat different from the Fed's full-scale quantitative easing," said Tong Yang Securities research analyst Jo Byung-hyun. He continued, "Then, "The European funds' preference for risky assets will increase to some extent and the Korean stock market will have a chance to benefit from it." @

Opposite Directions

KOSDAQ Losing Steam While KOSPI Retaining Momentum

The KOSPI and KOSDAQ are moving in the opposite directions, with the former retaining the 2,000 point mark and the latter drifting sideways. The investor sentiment outlook is not entirely rosy for the KOSDAQ, either.

The Korea Securities Dealers Automated Quotations (KOSDAQ) closed at 545.59 points on May 21, 2.6 percent down from the end of the previous month and 25.64 points short of this year's high, 571.23, recorded on April 18.

The index, which was at around 560 points late last month, lost no less than 10.78 points on May 19 alone after

repeated fluctuations. The drop continued for three days in a row from May 16, too.

The KOSDAQ was about to hit the 600 point mark earlier last year, thanks to the government policy for the assistance of venture firms and small and mid-size enterprises. However, foreign investors rushed out of the bourse in the wake of the Fed's exit strategy taking concrete shape in the second half.

The future outlook is rather gloomy as well. Institutional investors sold 155 billion won worth of shares during the four trading sessions starting from May 16, although individual and foreign



investors recorded purchases of 2.1 billion won (US\$2.05 million) and 26 billion won (US\$25.4 million), respectively. Besides, most of the companies listed there are expected to come up with lower-than-expected performances.

"The profit estimation error in KOS-DAQ was 1.5 trillion won in 2011 but increased to 3.1 trillion won last year," said Han Beom-ho, senior research analyst at Shinhan Investment & Securities, adding, "The net profit estimates for KOSDAQ companies are likely to be adjusted sharply downward, which could affect investor sentiment."

Long-time Friends

Close Partners in Shipping, Shipbuilding Industries



May 17 was Constitution Day for Norway, the country's national holiday. In commemoration of this yearly event, BusinessKorea sat down with His Excellency Torbjørn Holthe, Norwegian Ambassador to South Korea, to speak about opening new trade routes between the two countries, and continued cooperation in a variety of fields. What follows are excerpts from the interview.

First of all, please explain the brief history of diplomatic and economic relations between Norway and Korea.

Norway and South Korea first worked together during the Korean War when Norway sent over medical personnel to establish the Norwegian Mobile Army Surgical Hospital (NORMASH). Diplomatic relations were established in 1959. Since then, our bilateral relationship has only improved, and South Korea has become an important partner for bilateral cooperation, business and cultural exchange.

Economically, South Korea is Norway's second-largest trading partner in Asia, and trade is increasing. Norway and South Korea have complimentary economies, especially in the maritime industry, making trade mutually beneficial. South Korean shipyards produce state-of-the-art ships and oil rigs for Norwegian companies. Norway is a leading actor in ship classifications, and exports high-tech solutions in the maritime industry. Cooperation in the marine industry, and Norwegian export of marine products to South Korea has sharply increased in recent years.

Please let us know the significance of your Constitution Day on May 17 for our readers.

The Norwegian Constitution Day is a very special day in Norway. It marks our constitution from 1814, which laid the foundation for Norway to become an independent nation, and also for the democratization process, which has made our country a free and democratic country.

The day is celebrated with colorful processions of children with banners, flags, and music. In Norway, the streets will be filled with people, many in their various national costumes of bunad, to enjoy the processions and other festivities. As this year marks the 200 year anniversary of our constitution, the day is extra special to Norwegians.

Also, among the Norwegian population of about 1,100 people living in the southeast of Korea, mainly Busan, Ulsan, and Geoje, constitution day has been widely celebrated with processions, flags, and music along Haeundae beach in Busan. This year will, however, be different. After the tragedy of the Sewol ferry, our King Harald sent his condolences to President Park. And in respect for the victims and their families, there will be no processions in Busan this year, and the constitution day will be marked in a quiet manner.

As you are well aware, Korean former President Lee Myung-bak visited Norway in September 2102, and had summit talks with Norwegian Prime Minister Jens Stoltenberg about fostering a future-oriented bilateral relationship between the two countries. Please introduce major issues discussed and agreed to during the summit, and let us know any substantial progress made to date.

During former president of the Republic of Korea Lee Myung-bak's visit to Norway, the major topics discussed included cooperation in the Arctic areas, renewable energy, research, technology, and international collaboration. Two Memoranda of Understanding (MoU) were signed after the meeting. The first MoU dealt with shipbuilding and development of climate-friendly initiatives in the field; the second with shipping in the High North and further bilateral cooperation in the area.

Since the visit, and with strong support from Norway, South Korea has received the status of a permanent observer in the Arctic Council. The collaboration between educational institutions in our countries has been strengthened with a number of bilateral agreements. Cooperation in the shipbuilding industry has also flourished with major contracts between Norwegian ship owners, suppliers, petroleum companies, and South Korean shipbuilders. Both Norway and South Korea have also hosted joint seminars on shipping and shipbuilding. A contract between DSME and the Norwegian Armed Forces for the construction of a logistics vessel, and an agreement between the Korea Polar Research Institute and the Norwegian Polar Institute for a Joint Polar Research Centre, are among the most recent cooperation agreements.

Would you please tell us, from your point of view, how to further develop the bilateral trade and investment opportunities between the two countries?

MoUs and bilateral agreements like the free trade agreement between South Korea and the EFTA countries ease the barriers for trade and investments between our countries. Joint



seminars also provide a good arena for companies to share their opportunities and ideas, and give the participants the chance to meet and network. The Norwegian government aims to make Norway a tempting place for South Korean investments through an emphasis on a thriving business environment.

The increasing cooperation between Norway and South Korea in the Arctic and the possibilities for transportation along the Northern Sea Route bring major bilateral trade and investment opportunities between the two countries. Promoting economic activity and providing jobs in the north are important objectives of Norway's High North policy, also in collaboration with other countries such as South Korea.

Please introduce some successful Norwegian companies in Korea by industrial sector, and vice versa, in order to give conviction and insights to potential investors of both countries in the years to come.

The number of Norwegian companies coming to South Korea is increasing along with the strengthening of our bilateral cooperation and trade volumes. Kongsberg Maritime and The Jotun Group are examples of companies who have, with great success, invested heavily in the country and established factories. Kongsberg Maritime is a Norwegian company in the maritime industry. And the Norwegian Jotun Group is one of the world's leading manufacturers of paints, coatings, and powder coatings.

Ship and offshore classification society DNV GL, petroleum company Statoil, oil service company Aker Solutions, and shipping company EUKOR are among other successful Norwegian companies in South Korea.

Please introduce tourists' attractions in Norway for Korean tourists abroad.

Norway is the perfect destination for nature lovers. There are mountains plunging into the sea from hundreds of metres, fjords, and tall mountain peaks that provide excellent places for mountain hiking.

In northern Norway, tourists can ride a dog sledge to Kirkenes Snow Hotel, a hotel built again and again every winter, only with snow. The hotel provides a "northern light wakeup call," so guests may get a glimpse of the famous Aurora, which can be seen in large parts of northern Norway during winter.

Actually, the majestic scenery from the popular movie "Frozen" was based on Norwegian nature and villages with traditional wooden architecture. With regards to architecture, Norway is maybe most famous for The Opera house in Oslo. Our capital city also has famous museums such as the Viking ship museum and the Munch museum, which is showcasing the artwork of Norwegian painter Edvard Munch, perhaps most famous for his painting "The Scream". This summer, a large Munch exhibition will also be shown in South Korea at the Seoul Arts Center.

Traveling from South Korea to Norway has become even more convenient for Koreans since last year, when Hanjin launched 5 charter flights going directly from Incheon to Oslo. Due to the high demand for these tickets, direct flights will continue this year as well.

JOTUN

Providing Professional Solutions with Cutting-edge Tech for Korean Shipbuilders



Jotun Protects Property

In the late 1970s, Korea was a tough market to enter, but thanks to a few European customers who specified JOTUN paints, we had some success. Paint was imported from JOTUN Singapore. But without support from the shipyards and local production, the growth potential was limited, which led JOTUN to signing a license agreement with Chokwang Paint in 1982. In 1988, a joint venture sales office was established with Chokwang Paint."



That is the first statement that CEO Anthony Wong made at the start of the interview. JOTUN is a Norwegian multinational company established in 1962, while Chokwang is a Korean company that started in 1947. Chokwang Jotun Ltd. was established by combining these two companies. As the marine business grew, Chokwang Jotun bought a paint factory in Yangsan in 1992. To better meet customer needs, an R&D laboratory was established in 1999. Over time, Chokwang Jotun's market share grew and became an established supplier to the crown jewels of Korea's shipbuilding industry: Hyundai, Samsung, and DSME.

In 2007, Chokwang Jotun started a separate sales team to focus on the protective market for offshore and onshore customers. In 2009, the company opened a new state-of-the-art factory with a capacity of producing about 40 million liters of paints a year, and built a solid market position.

In last few years, new ship orders declined due to a slowdown in global trade and global excess tonnage, so Korean shipyards began to focus more on offshore structure construction like drillships, jack-up rigs, semi-submersible rigs, floating production, storage, and offloading units, offshore platforms, and more. While Chokwang Jotun marine sales declined, growth in offshore sales somewhat compensated for the loss of marine sales. In a short period, the

company achieved the number one position within Jotun global offshore business.

Wong said, "In 2013, out of 354 vessels with DWT of 32 million tons that were delivered in shipyards in Korea, 115 vessels with DWT of 10 million tons were protected with the JOTUN anti-fouling and anti-corrosive coatings system."

JOTUN has a full range of premium corrosion protection and fouling protection products like Resist and Barriers zinc primers, Jotacote and Penguard epoxy primers, midcoat and topcoats, Hardtop polyurethane topcoat anti-foulings SeaForce, Seamate and SeaQuantum range, Tankguard tank coatings range, specialty products Jotachar 750 & Steelmaster passive fire protections (PFP), Baltoflake, a glass flake reinforced polyester coatings, and more.

The performance of coatings is enhanced by proper application, and JOTUN's strong and well-trained team of coating advisors work with painting applicators to ensure that surface pretreatment is done, and application is carried out according to the painting specification.

"Being one of the 12th largest paint companies in the world, JOTUN has 60 companies in 39 countries to serve a wide range of customers, wherever they are," Wong explained.

In 2000, prior to the ban on TBT anti-fouling paint, JOTUN introduced anti-fouling SeaQuantum, a tin-free anti-fouling









based on silyl acrylate technology that not only protects the under water hull from fouling and marine growth, but also makes the coating surface smoother over time. Also, its unrivaled track record on fuel savings proves that it benefits ship owners and operators financially. Close to 10,000 vessels are currently being protected from fouling with anti-fouling SeaQuantum.

In 2011, JOTUN launched a unique Hull Performance Solution (HPS), which combines premium anti-fouling, technical service, and reliable tools to measure hull performance over time, with an unprecedented money back guarantee to ship owners and operators if performance fails.

In Oct. 2013, at Kormarine Exhibition in Busan, JOTUN launched a unique three-step HPS building solution for improving the Engine Efficiency Design Index (EEDI) and ship performance. This is offered to shipyards to improve their EEDI to deliver a competitive advantage in new building projects to their customers. The three upgrade components that can be mixed and matched in combination with reliable guarantees will serve the long-term interests of designers, yards, operators, and the environment.

Another exciting innovation from JOTUN is the Jotachar JF 750, an epoxy intumescent coating in 2013. Jotachar JF 750 protects offshore and onshore assets in the oil and gas industry that are at risk from explosion and hydrocarbon fires.

Without passive fire protection (PFP) measures, these incidents can escalate rapidly leading to catastrophic loss of life, assets and inventory. Jotachar JF 750 is industry's first mesh-free, next-generation solution for hydrocarbon and jet fires. Jotachar JF750 incorporates an advanced fibre matrix, eliminating the need for complex mesh reinforcement. When exposed to fire, Jotachar JF 750 produces a robust and temperature-stable insulating char, while the risks associated with incorrect mesh installation are eliminated.

The Jotun Paint School training program is regularly conducted for all its customers whether they are paint applicators, painting specifiers, or anyone who is interested in painting technology. It is a tailor-made module and training course that can be done in one hour or 3 days, depending on the customers' needs and requirements. This is not a JOTUN promotional program, and the topics range from causes of corrosion, different types of paint technology, common defects and causes, different methods of application, how paints protect structures from corrosion and the aesthetic value of the properties. The objective is to uplift the Korean painting industry on paints and painting technology.

CEO Wong said, "My vision is that we can be a professional and reliable partner to all our customers, and to achieve the number one position in Korea for all the segments we serve."

IT Training of The Disabled

A Disabled Student Participating in e-Life Competition with the Help from Event Staff in 2011



"Follow, follow, follow me!"

This is the line of G-Dragon in LG U+'s latest TV commercial. G-Dragon is the leader of the famous K-Pop group "Big Bang," and he is currently the advertising model for LG U+'s all-in-one smartphone plan called LTE8, also known as the "follow" plan. The number "eight" in Korean conveniently rhymes with "follow." The radical plan provides unlimited (mobile-tomobile only) voice calls, text messages, and data transfer for 80,000 or 85,000 won (US\$78.28 or \$83.17) per month, depending on the range of additional services. There have been unlimited plans before, for never for LTE. No other wireless communication service company in Korea can present this kind of deal.

The combination of eye-catching slogan and radical smartphone plan, plus using a really popular K-Pop idol in its LTE advertising campaign must have worked. For the first time since its establishment in 1996, LG U+'s market share in wireless communication services surpassed 20 percent in April. However, it's still the third out of three among major wireless communication service compa-

nies in Korea. Because of this, LG U+ is always in need of flash radical marketing campaigns to hit niche markets and keep the public aware of them.

Under its slogan for social contribution, "Love +: Happiness Adding Company," LG U+ has found a solution to use its resources effectively to help out the disabled: direct use of its high-tech devices and technologies. In April, it distributed 070 Players to the families of disabled people through Korea Blind Union. The 070 Player is an Internetbased home phone on which all Android smartphone apps can be installed and used. In the device, it added a special app called "Vonation," a compound word made from "voice" and "donation." The Vonation app is a library of poems and prose that were voice-recorded by the executives and staff of LG U+, so that the families of the blind can hear them.

Also, LG U+ has used this unique way of social contribution to make barrier-free movies. In March, it held an electronic audition to select ten people to participate in a movie as voice actors. The way to audition was to submit a recording of voiced lines from the pool through smartphones. The Korean Barrier Free Film Committee then got to select the winners by evaluating the sub-

missions.

Globally, LG U+ has been holding a "Global IT Challenge" since 2011. This event was established to help disabled students utilize IT and increase the level of information to which they are exposed to. This is more apparent in emerging countries. To encourage these students to use IT and to provide the opportunity to communicate globally, it held this event in different parts of the world.

In the first year, 150 participants from Vietnam and Korea gathered in Hanoi, Vietnam. In the second year, 360 IT specialists from around the world and disabled students from the Asia-Pacific region gathered in Songdo, Incheon. Last year, the event was held in Bangkok, Thailand.

This year's event was the biggest IT event in the Asia-Pacific region. Fully 130 disabled students and 40 IT specialists and public officials from around the world, a total of 240 people, participated in this festival.

The disabled students competed in the following categories: e-Tools, a document making and program utilization contest; e-Life, an Internet surfing contest; and the self-explanatory e-Sports. IT specialists and public officials shared related information and sought solutions in policy seminars.

For its innovative social contribution activities, LG U+ received a minister's award from the Ministry of Science, ICT and Future Planning (MSIP) at the 25th Information Culture Award Ceremony. Baik Yong-dae, CSR Team Leader of LG U+, said, "We will consider this award as an encouragement to be more active in sharing information culture, and do our best in CSR activities."

Long-history of Social Contribution

Doosan Group Makes Far-fetching Social Contributions Home and Abroad

On May 20, Doosan Group donated three billion won (US\$2.93 million) for the family members of the Sewol ferry disaster's victims and to improve the safety infrastructure of the country. Many companies, cities, organizations, and even celebrities including Hallu stars like Kim Su-hyun donated to this cause, but not in such a large scale as Doosan Group.

Shinsegae Group, one of the largest distribution and retail groups for food and fashion in Korea, sent a food truck to the disaster site to provide meals for 300 people, and South Korea's top ramen manufacturing companies like Nongshim and Ottogi Food donated their brands' ramen and water. But no other companies donated cash like the Doosan Group.

Assuming that the retail price of the most expensive ramen is 1,000 won (US\$0.98) per package, even 10,000 packages would only amount to 10 million won (US\$9,755). In this light, what Doosan Group has done to help out the ferry victims is quite generous.

As far-fetched as it might seem, it's nothing unusual for this socially-friendly conglomerate. In fact, Doosan Group has a long history of making monetary social contributions. Under the philosophy of enabling the growth and independence of human beings, it has been focusing on helping out people.

Since 1978, when the Yonkang Foundation (now Doosan Yonkang Foundation) was founded under the slogan "Education is the main drive for national development," which the first-generation Doosan Chairman Yonkang Park Du-byeong declared, it's been providing financial support for academic research, overseas study, and book donations. It's also operating Doosan Art



Center for the purpose of aesthetically enriching people's minds.

On top of this, the subsidiaries are making even more dynamic social contributions. Doosan Heavy Industries & Construction (Doosan HIC) made an agreement with Changwon City to collaborate on projects under local government policies, developing outstanding human resources, and supporting socially-neglected people. Doosan HIC is giving out financial support and scholarships to students of all ages under an agreement it made with special high schools and colleges. It also made connections with 70 child welfare facilities, runs experience programs for children and teenagers to experience new things and new places, and provides facility operating funds, donations for children, and even the famous study books published by Doosan Dong-a for free.

Globally, Doosan HIC is making social contributions in countries like Vietnam, India, and other Southeast Asian countries. Specifically, medical service, water pumps, scholarship programs, and other customized volunteer activities are being conducted in Vietnam. In India, it joined an elementary school in the region and is working on improving the country's education environment.

Another subsidiary is working very hard on social contributions. Doosan Infracore has been building primary schools in China since 2001 through "Hope Public Duty," a school-building movement in neglected areas. Until last year, it donated 985,000 yuan (162 million won, US\$158 thousand) to build 26 primary schools in 25 cities and autonomous regions, and is currently building six more schools.

Doosan Engine, another subsidiary of Doosan Group, is doing a different kind of social contribution by protecting the environment. It's cleaning the trash that is thrown out on the beach and the sea near Changwon's central port where its diesel engines get shipped out. It is also making similar social contributions as other affiliates, such as making an MOU with Cheongwang School for special students to help the disabled students to become independent.

Emissions Control

EWP Contributes to Cleaner Environment with Coal Upgrade



Reducing the emission of greenhouse gases has been a tough burden for the whole world. As we has become more and more aware of the seriousness of greenhouse gases, countries have gathered together to take actions to reduce the amount of carbon monoxide and other harmful gases released in the air. Through the Earth Summit, otherwise known as United Nations Framework Convention on Climate Change (UNFCCC), then onto the Kyoto Protocol to set up the guidelines, many countries agreed to limit the amount of gas emissions. Initially, South Korea was not subject to follow this guideline, but it voluntarily agreed to participate in 2008.

In 2012, South Korea enacted the Emission Trading Scheme to be implemented in 2015. For the first phase, the total amount of allowed emission is 1.64 billion tons. In May 2014, the Ministry of Environment (ME) announced the National Gas Emission Allocation Scheme to be followed in all industries in Korea.

Opposing the announcement, the Federation of Korean Industries (FKI), six other economic organizations, and 18 associations submitted a joint statement on June 1. Their argument was that ME had not considered future industrial growth and overly cut down on the gas emission based on old data, and following the guideline will eventually damage industrial competitiveness. This incident alone proves the amount of pressure gas emissions place on countries.

Lightening the burden, Korea East-West Power (EWP) has contributed to a cleaner environment. Last May, Korea East-West Power (EWP) signed the contract "Technology Cooperation for CUPO (Coal Upgrading by Palm Oil Residue) Project in Indonesia" with GS E&C. This agreement was signed for a feasibility study to export the CUPO technology to Indonesia. With CUPO technology, low-quality coal with high moisture content goes through drying and stabilizing process to minimize the reabsorption of moisture. Then the finished products get transferred to Korea.

To enable this technology, EWP went through R&D with Korea Institute of Energy Research (KIER) for four years marked under the 19.8 billion won (US\$19.3 million) national policy assignment, ultimately achieving in increasing the calorie from 4,200 kcal/kg to 6,500 kcal/kg. The coal is classified as low quality when the heat value is under 5700kcal/kg, ash content over 20 percent, or sulfur content over 1.0 percent.

EWP and GS E&C are on their way to building a coal manufacturing facility in Indonesia with the capacity of producing 5,000 tons per day. According to the agreement, EWP will be in charge of applying the CUPO technology and examining the effect on the boilers and other energy-generating facilities. GS E&C will be in charge of building plants and acquiring the suppliers.

When the facility with built-in CUPO technology is installed in Indonesia, where 40 percent of all coals in Korea already comes from, it will result in reduced cost of transportation due to delivering upgraded coal. It will also contribute to cleaner air for the upgraded coal will emit less greenhouse gas.

Going Overseas with SMEs

KOWEPO Reaches Out to SMEs for Product Export



Korea Western Power (KOWEPO) is a public enterprise in South Korea that works closely with SMEs. It firmly believes in communicating and sharing values with the SMEs. To earn trust and help them grow, KOWEPO has supported SMEs in R&D, technology development, sales channel development, management innovation, funding, and even training management skills. KOWEPO made a separate section in its website to provide information on the enactment and changes of policies. In the website, SMEs that have a membership can even keep track of which projects they applied for and which technology they sold. They can even check which companies with which they have networked.

KOWEPO held a Purchase Conference for Superb SME Products.

From May 13 to June 3, KOWEPO held a "Purchase Conference for Superb SME Products," starting from the Pyeongtaek headquarters, to support market expansion of it cooperating SMEs. In this conference, KOWEPO provided sales and promotion opportunities to SMEs that possess marketable technology, but not enough information and sales channels to sell their products or a venue in which purchasing representatives from different SMEs can build networks with each other. A total of 191 SMEs participated, and six billion won (US\$589.9 million) worth of purchase agreements was made. With this conference, KOWEPO abided by the Government 3.0 Policy: exchange of information through an open platform of

shared growth and actively seeking buyers to help out SMEs. Last year, KOWEPO helped SMEs make 190 billion won (US\$186.8 million) worth of purchase agreements, and this year, it is expecting to make over 200 billion won (US\$196.6 million).

Last November, KOWEPO opened a special section for Korean SMEs in Power-Gen International 2013 (PGI 2013) at Orange County Convention Center in Orlando, Florida, U.S. This 25-year-old convention is the largest exhibition of electricity-generating devices in the world in which 1,400 companies and 21,000 specialists from 75 countries participated. Last year, six power companies and the Korea Association of Machinery Industry (KOAMI) cooperated and managed 24 booths there. A total of 47 people from 26 SMEs promoted their technology and products.

This is an international export promotion event in which the most cooperating SMEs participated, and opened a special section exclusively to promote Korean SMEs grabbed the attention from major media. A total of 334 cases of consultation worth US\$567.3 million (5.77 billion won) occurred, with an on-site sale of oil rectifiers from Samyoung Fil-Tech.

KOWEPO provides support for exporting SME products and technology about 15 to 20 times a year. It launched WP Small Giants 30, an export association for cooperating SMEs, to promote their products to Myanmar and Vietnam.

Partnership with SMEs

KOSEP Providing One-Stop Service to Partner SMEs for Global Competencies

Rorea South-East Power (KOSEP) recently announced that it will create a management supporters group consisting of experts from various fields to offer free counseling and consultation to SMEs about managing their companies.



SME Good Product exhibition at Jiniu City.

On April 10, KOSEP

held an opening ceremony for the organizing management supporters group. In attendance was Heo Yup, CEO of KOSEP, and about 50 other CEOs of SMEs and management experts such as lawyers, patent attorneys, accountants, and management consultants at the grand meeting room in the main office located in Jinju City, South Gyeongsang Province. Certificates of appointment were given to Professor Jeong Mok-yong of SNU's Statistical Research Institute and other experts.

CEO Heo Yup said, "For SMEs to be global, strengthening management competencies is crucial along with improving technological expertise." He also said, "Management supporters and SMEs should work together by actively participating in the program." He emphasized, "With this project, KOSEP is going to provide customized support to SMEs to turn them into small but strong companies with global competitiveness."

By operating a pool of experts, the supporters group will help SME partners to build an efficient management system fit for each company through one-point counseling and consultation services to address problems in their management, and will further contribute to strengthening their marketing competitiveness.

The total 14 experts including Professor Jeong Mok-yong from SNU's Statistical Research Institute have been appointed for supporting the management area. The consultation service comprises the topics of management, legal, finance, human resources, and quality control.

The SMEs that are qualified to receive services from management supporters are subcontract enterprises that have a record of delivering products, maintenance, or R&D activities for KOSEP. The state-run power company will aggressively support these SMEs for their establishment of an advanced management infrastructure. By the end of this year, about 30 companies will be receiving this support.

At the shared growth conference in March this year, KOSEP announced a long-term plan to develop 50 companies into globally-competent corporations by 2023, and locate and intensively nurture about 150 SMEs that have growth

potential. Such efforts have been recognized by the government and received top marks in a performance evaluation of the shared growth management by the Ministry of Trade, Industry & Energy (MOTIE), for two consecutive years from 2012.

Along with management support and consulting, KOSEP promised to pave ways for SMEs to enter into bigger markets by supporting the SMEs' overseas marketing.

On the same day, KOSEP opened the "SME Good Product Exhibition" in the main office building of Jinju Innocity and announced that it will do its best to introduce good products of SMEs, promote them to overseas buyers, and support their entrance into the global market.

About 100 people attended the opening ceremony, including CEO Heo Yup, executives and staff of the main office, and CEOs of subcontractor SMEs.

CEO Heo Yup said, "To achieve the shared growth with SMEs, one purchase is more effective than a hundred words," and "This is the second exhibition hall after the one in our Yeongheung power plant, so we need to actively attract buyers that participate in local exhibitions of power generation facilities and devices, and develop exhibition hall operations done together with the specialized export agencies (G-TOPS) to a role model for expanding overseas markets."

The 100m2 exhibition hall on the 1st floor lobby of the main office building is arranged to promote good-quality products made by subcontractor SMEs in the region. Local and overseas visitors can buy the products displayed there. The exhibition space is provided to SMEs for free.

On the opening day, a total of 14 SME products were displayed in the exhibition hall, consisting of eight products in the machinery sector including Sung-II Turbine's high-temperature parts for gas turbines, and six products in the electric and control sectors including Duon System's transmitter.

Sustainable Green Growth

KOSPO's Innovative Management Earned International Spotlight

Korea Southern Power Corporation (KOSPO) announced it received the Edison Electric Institute's (EEI's) 2014 International Edison Award on Jun. 10. The awards ceremony was held in ARIA Hotel in Las Vegas.

EEI's International Edison Award is the electric power industry's most prestigious honor which gives prizes to companies that have made great contributions in developing the electric power industry. EEI began giving out this award since 1922, and it is a reliable benchmark in electric power industry for the judgment strictly bases on the company's performance in management innovation, the ability to conduct projects, and the development of technology.

By receiving this award, KOSPO's ability in management and technology in carbon capture and reuse (CCR) and circulating fluidized bed (CFB) combustion have acclaimed global recognition, which will be a reliable stepping stone for KOSPO to enter the global market.

Last year, KOSPO reached 7 trillion won (US\$6.9 billion) in sales. This is within 80th in rank among all financial sectors in Korea, and second in rank to Korea Electric Power Company (KEPCO) among all electric power companies. Since its spinoff from KEPCO in 2011, the sales has grown more than five times, from 1.32 trillion won (US\$1.29 billion).

This is because KOSPO actively engaged in global business and made substantial performance. At the end of last year, KOSPO formed a consortium with Samsung C&T and successfully acquired the construction and management project for BHP Kelar combined gas power plant, which Chile Agency of an Australian global mine enterprise BHP Billiton ordered. The project size is about US\$580 million (595 billion won), and the construction began early this year. It is expected to be completed at the end of 2016, with the capability of supplying a maximum of 3,400GWh of electricity per year to copper mines and industrial complex.

Also with Korean SMEs, KOSPO successfully entered Chinese market for building environmental facilities. Last year, KOSPO signed a joint venture agreement with several environmental facility companies in China in Taiyuan, Shanxi. Also, when the construction of Kelar power plant in Chile is completed, about 500 million won (US\$489,000) of equipment made in Korea is going to be exported every year, along with jobs from private companies. Last October, KOSPO has been selected as the preferred company for operation and maintenance project of combined thermoelectric power plant in Turkey, so even more jobs will be created.

KOSPO is also actively investing in creating cleaner energy to provide reliable, affordable and increasingly clean elec-



Lee Sang-hoo (right), CEO of Korea Southern Power Corporation (COSPO), poses with Tom Kuhn, CEO of Edison Electric Institute (EEI), after receiving the 2014 International Edison Award on June 9 (local time) at the EEI's annual meeting held in ARIA Hotel in Las Vegas.

tricity to customers in current situations of extreme climate change.

To follow the government policy to reduce greenhouse gas emissions and earn leadership in the global response to climate change, KOSPO is onto the development of 100 units of domestic wind turbines, expanding the supply of clean energy such as natural gas and low-carbon fuel, and developing carbon capture and reuse (CCR) and circulating fluidized bed (CFB) combustion.

Recently, KOSPO constructed the world's largest and first dry process 10-megawatt CO2 capture facility at the Hadong Thermal Power Plant No. 8. This 10MW dry carbon dioxide capturing plant can capture 70,000 tons of carbon dioxide per year, the same effect as planting 14 million pine trees that can absorb 5kg of carbon dioxide per year. This is the first-in-the-world pilot facility to be applied to the power plant.

KOSPO is not just going to stop at storing CO2 but advance to capture and reuse (CCR), ultimately Capture & Reuse to build a foundation for profit and also creates jobs.

Also, to enforce safety culture and teach emergency response capability, KOPSPO has introduced and is currently operating state-of-the art technology. From 2013, KOSPO implemented Behavior Based Safety (BBS) program to help workers to understand the importance of safety and help them to take safer actions. It also implemented Business Continuity Management (BCM), disaster recovery program, to all departments to help workers get back to work quickly from disasters. It is also rechecking manuals on disaster and safety at once, and training the workers to handle the crisis well periodically, all to strengthen the worker's ability to handle different kinds of situations. All these efforts became the key factors for KOSPO to receive ISO 22301 in disaster response sector.

Rising Profile

KEPCO E&C Makes Global Entrance in France with Thermonuclear Energy



KEPCO E&C had an opening ceremony for its representative office at Aix-en-Provence, France.

For closer and faster cooperation with the International Thermonuclear Experimental Reactor (ITER), KEPCO Engineering & Construction Company (KEPCO E&C) opened a representative office in France.

On June 6, about 20 guests including the CEO of KEPCO E&C Park koo-woun, Secretary General of ITER Osamu Motojima, ITER Korea Project Director Jung ki-jung, Minister of Korean Embassy in France Lim woong-soon, and Deputy Mayor of Aix-en-Provence Pierre Castoldi participated to celebrate the opening ceremony.

The ITER project is a mega-scale international cooperative R&D project in which seven countries including the US, Russia, and the EU put thermonuclear energy to use in hopes of eventually replacing oil and coal power and slow down global warming. KEPCO E&C acquired projects worth a total of 50 billion won (US\$49.4 million) in 2008. It decided to open a contact office in France to work closer with ITER, increase the number of projects, and also expand its market in building power plants in Europe.

In April, KEPCO E&C closed a contract on cable engineering service worth 18.3 million euros (28 billion won, US\$24.8 million). It will be in charge of design and technical support for cables that will be used for building a 500MW experimental

thermonuclear reactor in France over five years. To build this reactor, it will take a cable that is large enough to handle four nuclear plants. World-renowned companies like Alstom, Cegelec, Empresario Agrupados, and Tata Consortium also bid for this project, and KEPCO won the bid.

ITER Korea Project Director Jung ki-jung said, "KEPCO E&C made a great contribution to get Korea's technology recognized globally through dispatching qualified human resources and continuous project acquisition."

Last year, KEPCO E&C and the National Fusion Research Institute (NFRI) acquired a turn-key project of design, purchasing, and pilot testing of a central interlocked controller worth 7.8 million euros (10.8 billion won, US\$10.6 million), which the ITER international organization ordered. The consortium was recognized by the ITER international organization for its superior design technology of controllers and project performance and experience in building atomic power plants. It beat out companies in France and Spain.

A source from KEPCO E&C's Nuclear Department said, "It's meaningful because by acquiring a project for a controller system network implementing service in such a large scale, we have proven that KEPCO E&C is not a major ITER project executor."



Public Service Twice

KOMSCO's Determination to Make a Better World Goes a Long Way

rorea Minting, Security Printing & Korea Minung, Security
ID Card Operating Corp (KOMS-CO) is the first public enterprise to carry out this year's government assignment, "socially recognizing that ability should not be evaluated by academic records," with its open recruitment of new employees. For positions on sales, promotion, and social contributions, KOM-SCO decided not to request school information, GPA, foreign language score, or certificates from the candidates. For these kinds of job positions, the level of education is not the main factor in work performance. So, the decision it made seems to have caught three birds with one stone: complying with the government's request, being sensible in seeking employees, and earning a good name for leniency.

KOMSCO is the sole currency and national ID card manufacturer in Korea. The company started off with full investment from the National Treasury in 1951. It was established so that Korea could supply banknotes on its own, which is a big step to make a country financially independent and supported. Its role was sufficient enough to keep its business there, but it expanded. In 1970, it started exporting banknotes by signing

a supply agreement with Thailand.

From then on, KOMSCO has been setting an exemplary image among public enterprises. It has, and still is, actively promoting overseas business. Expansion of its business overseas actually made it stable, providing financial leverage when in need. With its first exports in 1970, it became a supplier of coins, banknotes, banknote papers, special inks, National Identification cards, and passports to more than 40 countries. It not only exported finished products, but semi-finished products such as design, engraving, and layout techniques, original and printing plates, and even training and consulting.

KOMSCO has made itself into one of the few total security solution providers in the global market, and stable enough to look around outside of its core business. Since 2011, KOMSCO committed itself to social contributions to create a better society.

In just April this year, KOMSCO invited 30 people from the House of Love, a facility for the disabled in Daejeon, for a walk on a cherry-blossom-lined road in Daejeon and a visit to the Currency Museum, established in 1988. It runs this program every month, visit-

ing facilities for the disabled and seniors and bringing free meals. Also, it held a campaign called "The Best Gift of My Life" with World Vision in order to help make a better world through sharing and helping. Each executive and staff member of KOMSCO gets to support one child in need from a different country.

Kim Hwa-dong, CEO of KOMSCO, said, "We are going to do all we can to help all executives and staff to actively participate in social contributions and find more diverse and creative ways of making social contributions, thus making KOMSCO a leading public enterprise that earns trust and shares happiness with the public."

In Korea, KOMSCO helps out with an expertise donation group called "... And Share." Ten donors and 30 children from multicultural families participated in "The One and Only Shirt for Me" program. Banknote designers of KOMSCO gathered to make the expertise donation group, and they have been doing pro bono activities by teaching the children in welfare facilities art and banknote design. Thirty-five pro bono activities by 278 staff have been done in 2013, and these activities will continue to be done to help society.

As a result of all these efforts, this well-managed public enterprise received the top grade in "Customer Satisfaction Research" for six straight years from the Ministry of Strategy and Finance (MOSF). Each year, the MOSF evaluates 182 public enterprises and semigovernment institutions for services and products. In 2013, it received 25.6 points from its certificate stamps, contributing greatly to receive the top grade.

Ranked 9th in Global Trade

Korea Records Current Account Surplus

for 26 Consecutive Months

The Bank of Korea announced on June 29 that Korea's tentative current account surplus reached US\$7.12 billion in April. The balance of current accounts had turned from a deficit of US\$2.41 billion to a surplus of US\$3.81 billion in March 2012, and the surplus has continued for 26 months in a row.

The size of the surplus declined by US\$170 million (2.2 percent) from a month ago but rose by US\$2.57 billion (56.5 percent) year-on-year to set a new monthly high. The cumulative current account surplus amounted to US\$29.44 billion during the four months of this year, which is equivalent to 43.2 percent of the current account surplus for this year estimated by the Bank of Korea.

The goods account surplus increased

from US\$7.97 billion to US\$10.65 billion between March and April. The exports rose by 10.0 percent from a year earlier to US\$56.72 billion while the imports fell 0.9 percent to US\$46.07 billion.

"The goods account surplus showed an upward movement thanks to the increase in the export of automobiles, steel products and the like amid the economic recovery in the United States and Europe," said Roh Choong-shik at the Economic Statistics Department of the central bank.

The services account deficit totaled US\$1.04 billion, US\$390 million higher than that of the preceding month, due to the deterioration of the balance on the transportation side.



Meanwhile, Korea's global trade ranking slipped for the first time in 17 years. The Bank of Korea announced on May 20 that the country ranked ninth in terms of trade share in April, following China, the U.S., Germany, Japan, France, the Netherlands, Britain, and Hong Kong.

Korea had ranked eighth in 2012 and 12th in 1997. The country's share has shown consistent growth since 1998 from 14th. However, imports were affected by the recession of last year, when the import amount fell 0.7 percent year-on-year to US\$515.6 billion. The share of exports from Korea declined in 2013, too.

ICT Exports

Reduced May Workdays Cause Decrease in ICT Exports by 7.5%

Korea's exports in the information and communications technology (ICT) sector decreased slightly last month compared to the same period last year, due to a reduction in workdays stemming from holidays.

The Ministry of Science, ICT and Future Planning (MSIP) announced on June 10 that ICT exports totaled US\$14 billion in May, a 7.5 percent year-on-year drop. The reduction in ICT exports is mainly attributable to decreased work-days, since there were many holidays such as May Day, Children's Day, and Buddha's Birthday.

The total number of workdays were 20.5 to 21.5 days in May, a slight reduction compared to the 23 days of the previous year. Average daily ICT exports, on the other hand, amounted to US\$651

million last month, up US\$32 million from a year ago.

ICT exports hit a record high of US\$69.9 billion during January-May this year. The nation's trade surplus in the ICT sector equaled US\$7.25 billion in May, contributing to Korea's trade surplus of US\$5.35 billion.

Last month, imports of ICT goods recorded US\$6.75 billion, a year-on-year reduction of 1.8 percent.

By category, imports of computers and peripheral devices gained 2.8 percent to reach US\$710 million. Inbound shipments from mobile phones surged 155.9 percent to hit US\$580 million, and display panels edged up 2.6 percent in imports to US\$ 500 million. In contrast, semiconductor imports decreased by 14.9 percent with US\$2.64 billion, and



those of digital TVs also inched down 6.0 percent to US\$30 million.

Among countries, inbound shipments from the US and the UE decreased, whereas those from China (including Hong Kong) and Lain America rose. Specifically, imports from the US recorded US\$550 million (down 11.3 percent), followed by US\$500 million from the EU (a 1.7 percent drop). On the other hand, those from China went up 6.0 percent to log US\$ 2.5 billion, followed by a 9.8 percent rise from Latin America (US\$50 million).



With the Korean government's indiscriminate regulations on the IT industry deepening, a growing number of local Internet companies are leaving Korea.

As the nation's major portal operators like Naver, Daum Communications, and SK Communications, mobile and online games developers, and start-ups are all joining the trend, there is growing concern about the possibility that the local IT industry will become devoid of substance.

According to industry sources on May 25, the government's growing regulations in recent years are prompting local Internet companies to leave the country and to gain footing abroad, instead.

Naver is a case in point. The nation's top portal operator already established a foothold in the global market by setting up its overseas local subsidiary, LINE Corporation, in Japan. Messaging app LINE has surpassed 420 million users worldwide so far. The country's secondlargest portal site, Daum, is also trying to lay the foundations for its Android app "Sol" overseas. The company is delivering the latest information about Sol to users around the world through a global community that opened early this year. In addition, SK Communications is actively seeking to make an investment in marketing for its Android camera app Cymera in other countries including the US, even though the company has yet to decide on local marketing costs for

The local gaming industry is also moving towards other countries. "Some

foreign countries are trying to attract Korean gaming companies through various tax benefits and financial support," said Kim Sung-gon, executive secretary of the Korea Internet & Digital Entertainment Association. He added, "The governments of China, some Southeast Asian countries, and the UK have showed interest in local gaming companies and have requested related information."

Some local IT start-ups have their base in foreign countries. A head of a local start-up remarked, "Due to the characteristics of IT services, IT companies can gain their footing abroad if they put their mind to it." The head continued by saying, "In the past, the Korean market had an advantage in that they are accustomed to Korean culture, although the size of the market was small. But with government's regulations increasing, a growing number of people believe that it is hard to expand businesses at home."

The main reason for this phenomenon lies in the fact that the government's regulations are becoming stricter. Currently, there are 7 government agencies in charge of regulating the Internet industry — the Ministry of Culture, Sports and Tourism (MCST); the Ministry of Science, ICT and Future Planning (MSIP); the Korea Communications Commission (KCC); the Korea Fair Trade Commission (FTC); the Ministry of Health and Welfare (MOHW); the Ministry of Public Administration and Security (MOSPA); and the Ministry of Gender Equality and Family (MOGEF). There is growing controversy over the

efficiency of regulations, since each government agency is imposing regulatory constraints upon the same issue.

In particular, the executive secretary commented on the gaming industry by saying, "There is no control tower at the governmental level. So, competition between relevant government agencies is creating more intense regulations. After the mandatory game shutdown system imposed by MCST and MOGEF, the Ministry of Education (MOE) and MOHW are apparently trying to regulate the gaming industry as well."

Kwon Heon-young, professor of the Department of Science and Technology law at Kwangwoon University, pointed out, "The most urgent thing to realize the 'creative economy' policy is to establish a new agency responsible for regulating the Internet industry that can control all the government agencies."

Choi Sung-jin, executive secretary of Korea Internet, remarked, "According to app developers, foreigners comprise 70 to 80 percent of people who download apps." He also stressed, "Sometimes, foreign customers cannot use the apps, owing to Internet regulations intended for Korean users who only make up around 20 percent of the total." He continued by saying, "The Internet has become a single ecosystem. Currently, leading companies usually do not consider moving overseas after laying the foundations for their business." He added, "As long as regulations that are out of touch with reality continue, local Internet companies' declining global competitiveness will be inevitable." 🚳

Automotive Semiconductors

Global Semiconductor Companies Invading Korean Auto Market vis New Eco-friendly Tech

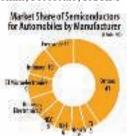
Global semiconductor manufacturers are paying attention to the Korean auto market, which reflects the reality of the local auto industry. The local industry has a long way to go in the automotive semiconductor sector, even though it has grown to become the sixth-largest in the world.

US-based semiconductor company Texas Instruments (TI) has been consistently increasing the weight of automotive semiconductors, as seen by the fact that sales of its automotive products accounted for 13 percent of total semiconductor revenues last year. According to research firm Strategy Analytics, the share of TI in the global automotive semiconductor market was about 5 percent in 2013, similar to that of the Bosch Group, the largest auto parts supplier based in Germany.

Kang Sang-keun, director of TI Korea said, "After former CEO Kent Chon was appointed two years ago, an automotive team was created to concentrate on Korea with a big brand like the Hyundai Motor Company and Kia Motors." He went on to say, "We will continue to make an investment to bring our automotive experiences accumulated for 30 years to Korea." The director explained that the company is working on a project aimed at developing technologies related to smart cars in partnership with global automakers such as Hyundai and Kia Motors. Currently, a team consisting of 16 to 17 people is involved in the project.

Intel, Qualcomm, Freescale, ROHM

Semiconductor, and Linear Technology are also actively seeking to dominate the local automotive



semiconductor market by entering the field of infotainment, vehicle stability control system, and electronic control units.

The reason for global semiconductor companies' interest in the local market lies in the fact that the use of semiconductors in cars is on the rise, since smart and eco-friendly cars are becoming popular. According to the Korea Automotive Research Institute, the global smart car market will continue to grow 7.4 percent year-on-year to reach US\$274 billion in 2017 from US\$190 billion in 2012. On top of that, US-based market research firm HIS reported that semiconductor components needed for one car were worth US\$330 in 2012, an increase from the US\$200 of 2002. The research firm also said that the demand for automotive semiconductors will greatly increase, since nearly 152 million units are expected to be connected with the Internet by 2020.

However, the local semiconductor industry has yet to produce any tangible results. In 2009, Samsung Electronics and Hyundai Motor worked together to develop automotive semiconductors, but met with little success. Thus, it is necessary to nurture fabless semiconductor companies so that the auto industry can produce various customized items in a small quantity.

Given the LG Group's decision to acquire Silicon Works, which is the nation's largest fabless semiconductor company, and its willingness to start its automotive electronics business, other local companies are likely to be more engaged in the automotive semiconductor sector. In the case of the LG Group, its affiliate LG Chem, which is the world's largest medium and large-sized battery maker, would give the group an advantage over rival companies in competition for the auto market.



DRAM Market Dominance

Korea Comprises 65%+ of Global DRAM Market in Q1

Samsung Electronics is enjoying a 23-year reign as the world's No. 1 DRAM maker, and SK Hynix recaptured the runner-up position during the first quarter of this year. Stellar performance of the two companies proves that Korea is indeed a powerful nation in the semiconductor sector.

According to market research firm IHS iSuppli, Samsung maintained its top DRAM maker spot in Q1 2014 with \$12.678 billion in sales and a 37.2 percent share. Its market share is a 1.0 percent year-on-year gain. The Korean tech giant has never lost its iron-fisted grip of the worldwide DRAM market since 1992.

SK Hynix also posted a 1 percent year-on-year increase in its market share, from 26.8 percent to 27.8 percent. Sales of the two companies amount to two thirds of the global DRAM market.

Meanwhile, Samsung also became the top-ranked mobile DRAM manufacturer with a 46 percent share, according to semiconductor e-commerce site DRAMeXchange. Given that the demand for mobile DRAM surpassed that for PC DRAM in Q1, the company is likely to maintain the top spot for the time being.



Chasing Intel

Samsung Narrows Gap with Intel in Semiconductor Market to 2.8%

Samsung Electronics is eyeing the top spot in the global semiconductor market, as its system semiconductor business is showing an upward trend, following its lead in the semiconductor memory market.

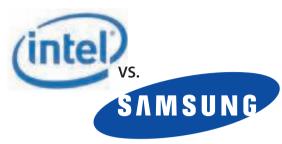
According to market research firm HIS on June 8, Samsung turned over US\$9.187 billion in the global semiconductor market in the first quarter of this year. The company's market share rose to 11.5 percent, a nearly 1 percent year-on-year gain. Accordingly, the Korean firm narrowed the gap with Intel to 2.8 percent.

The Korean tech giant has maintained its position as the world's largest computer memory chip maker so far this year. Sales of its semiconductor memory chips totaled US\$5.882 billion

in Q1 2014 with a 34 percent share, which helped the company widen the gap with Micron in the runner-up position with a 22.2 percent share to more than 10 percent.

Samsung's sales in

the system semiconductor business that had been outperformed by Intel and Qualcomm bounced back this year, which contributed to its overall good performance. The Korean firm reported US\$2.935 billion in system semiconductor sales in Q1, which made its market share rise to 5.3 percent. Thanks to its good sales performance, the company was able to snatch third place from Texas Instruments with a 4.8 percent share in the global system semi-



conductor market, after years of remaining in the fourth spot.

As a result, the semiconductor industry thinks that Samsung could unseat Intel to become the world's number one semiconductor supplier in a few years. To attain the goal, the Korean tech firm has been focusing on enhancing the competitiveness of its relatively weak system semiconductor business.

Increasing AP Competitiveness

SK Hynix to Acquire Firmware Business of Belarus-based Softeq

Sk Hynix announced on June 5 that it bought the firmware division of Softeq Development FLLC to improve its capability to develop 3D V-NAND flash memory chips.

Softeq is a Belarus-based software developer that specializes in firmware, mobile and web applications. The firm is considered to have secured great ability in developing firmware through cooperation with a number of NAND flash makers after its establishment in 2008.

The Korean chip maker is planning to sharpen its competitiveness in NAND flash solutions by acquiring technology, manpower, and assets of Softeq's firmware arm.

SK Hynix is also going to secure a new technology base in Belarus after

the US, Italy, and Taiwan, and to expand its global R&D network. It plans to enhance its capability by recruiting outstanding experts in Eastern Europe and Russia as well.

Firmware refers to a computer program inside a NAND flash controller that improves the speed and stability of the product. The importance of firmware has been increasing as mobile devices like smartphones and tablet PCs have become much more advanced. Moreover, requirements for solution products have been diversified. There is fierce competition between companies to secure talented firmware experts.

A SK Hynix official said, "We will be able to have excellent firmware professionals, enhance the competitive-



ness of NAND flash, and strengthen our R&D capacity through this transaction."

Meanwhile, the world's secondlargest memory chip manufacturer is actively engaged in M&A activities to sharpen its competitive advantage in NAND flash solutions and to strengthen its R&D capability.

Previously, SK Hynix purchased Italy-based Ideaflash S.r.l, and Link A Media Devices in June 2012. It also bought the eMMC device controller business unit of Taiwan-based Innostor Technology in August 2013. The Korean company acquired the expansion card division of US-based Violin Memory in May this year.

Reverse Discrimination

Microsoft Controversially Expanded the Application of Free OS

It has been found that Microsoft's "Windows 8.1 with Bing" for massmarket mobile devices covers a wider variety of targets than in the previous announcement. The possibility of controversy surrounding the lack of fairness is heating up among those who have already paid for Windows 8.1.

Earlier this year, it was predicted that Windows 8.1 with Bing would be available free of charge for certain smartphones and tablet PCs. However, Microsoft had talks with some PC manufacturers to supply them with the new version.

Windows 8.1 with Bing provides the same functions as Windows 8.1, but comes with Bing as the default search engine of Internet Explorer and a one-year Office 365 account. Such an aggressive offer by the giant dominating 90 percent of the global PC OS market is due to the overwhelming presence of Google Android and Apple iOS in the mobile market. The idea is to give up on OS license fees while obtaining Office subscribers and strengthening its search engine to increase its presence in the mass market.

MS announced that the free OS would be installed on smartphones and tablet PCs priced below US\$199 with screens smaller than nine inches. However, it has been confirmed that the OS has been installed on other products, including tablet PCs from Toshiba and 15-inch laptops from Chinese manufacturers. Some of these products are available in Korea as well.

Under the circumstances, controversy over reverse discrimination could arise, as only those who buy low-priced PCs can use Windows for free. This can be uncomfortable for PC manufacturers as well as general consumers.

"Windows 8.1 with Bing is divided into the free version complying with

hardware guidelines, and the discounted version resulting from the negotiations with PC makers," MS Korea explained in response, adding, "Major corporations in Korea such as Samsung Electronics and LG Electronics

have not introduced the new OS yet, and the introduction will be determined



A typical start screen of Windows 8.1 with Bing.

in the future depending on the extent of mutual cooperation."

Repeated Expenses

Korean Banks Subject to Spending Billions of Won on Every Expiration of Windows OS

Major Korean banks are actively of automatic teller machines (ATMs), since most ATMs still run Windows XP. Microsoft's official support of the aging operating system (OS) ended as of April 8, and thus it has become more vulnerable to hacking or security attacks. However, the replacement of Windows XP with Windows 7 and the upgrade of the existing security solution for ATMs would cost a huge amount of money. Even with the upgrade, security problems cannot be solved completely. Therefore, Industry analysts are saying

that it is necessary to come up with a measure that can fundamentally address the problem.

According to sources in the financial industry on June 11, major local banks are working to provide security updates for ATMs mainly in the metropolitan area. More than 95 percent of bank ATMs in the nation are based on Windows XP, which must be replaced with Windows 7 in the near future.

Despite consistent warnings about security threats for Windows XP, local banks plan to gradually conduct security upgrades in line with the service life of each ATM. The plan is attributable to the fact that most ATMS are operated using a closed network separated from th Internet. Moreover, an independent security system is used for their ATMs.

ATMs that are being upgraded at the moment are already fitted with Windows 7. Notwithstanding the installation of Windows 7 on those devices, only security solutions for Windows XP were available in the past. Furthermore, some problems with Windows 7 application compatibility caused the banks to downgrade some ATMs from Windows 7 back to Windows XP. Hence, the switchover from Windows XP to Windows 7 is currently under way.

An industry source said, "Most of the ATMs in the country are said to be based on Windows XP, but Windows 7 is already installed on nearly half of them," adding, "We are working to switch software from Windows XP to Windows 7. The work does not cost any extra money, because it is not necessary to replace the existing OS with a new one. So, there will be no burden of replacement costs. And also, it is possible to strengthen ATM security with minimal cost."

The problem is outdated ATMs that need Windows 7. These old devices account for half of all ATMs, and thus banks ay have to buy ATM hardware itself.

An industry source remarked, "Leaving aside the issue of upgrading from Windows XP to Windows 7, the replacement of existing components of a security solution with new ones would cost billions of won." The source added, "The replacement work would cost a lot of money, since all the work needs to be done in one or two years."

In particular, upgrading to Windows 7 and replacing components only



A typical Korean ATM of the type seen all across the country.

guarantees another four or five years of service. Experts are saying that the biggest problem is that once Microsoft's technical support for Windows 7 eventually ends, the same kind of work will be needed again. An official at a financial company pointed out, "The phenomenon that the end of a specific firm's technical support generates a big problem for all financial devices seems to be wrong." The official concluded by saying, "But there is no choice but to upgrade to Windows 7."

Chinese OS Policy

China Bans Windows 8 on Gov't Computers

The Chinese government is expanding the use of its own operating system (OS) for PCs, as seen by its measure established in May to ban the use of Windows 8 for newly-purchased PCs in public institutions. As a result, Beijing's endeavor to wean itself from Microsoft's Windows OS is likely to be a big burden for Microsoft which is pushing ahead with its strategy to induce people to migrate from Windows XP to Windows 8.

According to industry sources on June 9, the Chinese government's policy to use a locally-made OS for PCs is intensifying. On May 16, the government ordered the Central Government Procurement Center to exclude PCs and tablets, on which Windows 8 was installed, from its bidding items.

This measure is widely acknowledged as Beijing's effort to raise the

stakes in preventing problems related to the end of Microsoft's official support for Windows XP. Xinhua News Agency reported, "The Chinese government took a preventive measure to reduce the further use of the defunct OS like Windows XP," adding, "The government did so to prevent a similar situation from occurring in the future."

Beijing is expected to strengthen a policy to use its own Linux-based operating platform for PCs, following this measure. Since 2010, the Chinese government has pursued an OS project, but has not succeeded in the distribution or widespread use of its own OS. However, the government is expected to expand the distribution of its own OS, together with academic circles and IT companies, starting with its recent move to ban the use of Windows 8. China is heavily dependent on the Windows OS to the



extent that it run 97 percent of the computers in the nation. Thus, an increasing number of voices are calling for the country's OS dependence.

The local software industry believes that Korea should keep a close eye on the Chinese government's measure, since Korea is one of the countries that are also heavily reliant on Windows OSes, although the nation is less dependent than China. An official in the software industry remarked, "Since our country is heavily reliant on Windows OS, the situation at home is not that different from that in China." The official concluded by saying, "Microsoft's technical support for other Windows versions will eventually end, like in the case of Windows XP. So, it is necessary to come up with a measure to address the problem." @

Indie Mobile Game Platform

Korean Mobile Gaming Companies Striving to Launch Their Own Platform

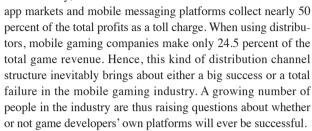
An increasing number of local mobile game developers are working to create their own game distribution platforms. Gaming companies are launching their own mobile games distribution channels without going through intermediaries like app markets or mobile messaging platforms.

According to industry sources on June 9, Gamevil and Com2uS are going to release their mobile game channeling platform that combines Gamevil's platform "GAMEVIL CIR-CLE" and Com2uS's game channel "Com2uS Hub" as early as July. An industry source said, "The global network of Gamevil and Com2uS is expected to give them an advantage over their rivals."

NHN Entertainment is reportedly scheduled to showcase its own platform as early as the latter half of this year. An NHN Entertainment official remarked, "We are carrying out an overall review of the creation of a platform by analyzing data at the moment."

The reason for game developers' efforts to build their own platforms lies in the fact that the complex distribution channel structure of mobile games is aggravating their profit structure.





First of all, the already-created platform market is very solid. Google's and Apple's app markets and the KakaoTalk platform are dominating the local mobile gaming platform. On top of that, large IT enterprises at home and abroad such as Naver's Band, Facebook, and Tencent have already launched their own gaming platforms to curb KakaoTalk's influence.

The fact that there was a failure case in the past is a big burden for game developers. Nexon rolled out FIFA Online 3 M, along with its mobile gaming platform "Launchpad." But the company recently discontinued the service for its platform.

Mobile Video Ad Platform

Local Company Mounting Serious Challenge to Google in Korean Mobile Video Ad Market

According to industry sources on June 8, Incross, the only company in Korea that develops both mobile phone and server platform applications, is actively seeking to increase its share in the local video ad plat-



form market that was dominated by Google until last year. Thus, competition between Google and local firms to dominate the local mobile video advertising market estimated at 60 billion won (US\$58.8 million) is expected to heat up.

The search engine giant introduced TrueView to Korea in early 2012. As the name suggests, the TrueView format allows advertisers to only pay when people choose to watch their video ads. Hence, Google's video ad format is met with a very positive reaction from advertisers after its release. In particular, as the share of YouTube shot up to 70 percent last year after showing mediocre performance in the local market, local advertisers flocked to YouTube in 2013.

The industry believes that Google turned over around 30 billion won (US\$29.4 million) last year. Since there was no visible video advertising platform provider in the nation except the Web search giant in 2013, Google's sales figure reflects the size of the local video ad market that year. However, with Korean-based Incross mounting a serious challenge starting in April of last year, the dynamics of the market previously dominated by Google have been changing.

Incross released its video ad platform called "Dawin" and forged partnerships with local video media. The number of business partners has increased from 4 (Gom T, Africa TV included) to 14 within one year. The Korean firm is expected to compete with the US tech giant in the local market this year, with a sales target of 10 billion won (US\$9.6 million).

Industry experts are saying that the local video ad platform market is still in its early stages, and thus it has tremendous growth potential. With an increasing number of people watching videos on their mobile devices, the mobile ad and video ad platform markets are likely to grow in tandem.

Creation of New LT Giant

Daum to Acquire Kakao, Creating Strong Competitor against Naver Sae-Hoon Choi (left) and Kakao co-CEO Sirgoo Lee (right) announce their merger at a press conference on May 26 at the Plaza Hotel near Seoul's City Hall.

Daum Communications, South Korea's second-largest Internet portal, announced early in the morning on May 26 that it will acquire Kakao, the country's top mobile messenger service, through a stock swap arrangement.

"The merger will solidify core business operations and create positive synergy," Daum said through a regulatory filing, adding, "The swap ratio has been set at one Daum share for 1.5557456 shares of Kakao."

The M&A deal will create an information technology (IT) firm with mar-

ket capitalization of over 3.4 trillion won (US\$3.318 billion). The two companies are expected to elaborate on the merger later in the day at a press conference in Daum's headquarters in Seoul.

The merger is expected to take place on Oct. 1.

There was widespread speculation early this year that the two companies were discussing their merger behind the scenes, since Daum's needs for a new market in mobile services and Kakao's interests in web-based content seemed to fit perfectly together.

A news organization quoted sources in the financial investment industry on May 24, reporting that each firm already discussed a M&A deal by holding a board meeting on May 23.

Experts are saying that it will become a win-win deal, because Kakao can secure various content in the local market through the merger. Daum is also expected to have a mobile platform through the deal. Nevertheless, there are mixed views as to whether or not the deal will be able to generate synergy in the global market.

Tencent's Windfall

Daum-Kakao Merger Raises Value of Tencent's Stake by Factor of Five

With Tencent, one of China's largest Internet service companies, becoming one of the major shareholders of Daum-Kakao with a 3 trillion won (US\$2.9 billion) market cap, its influence is expected to be expanded to Korea's online market, going beyond mobile.

According to sources in the securities industry on May 27, Kim Bumsoo, chairman of the board of directors for Kakao with a 22.23 percent stake, Kcubeholdings with 17.60 percent, and Tencent with 9.9 percent will become the three major shareholders of Daum-Kakao, which will be launched in October. If the chairman's 100 percent stake in Kcubeholdings is regarded as his own stake in the soon-to-be merged company, Tencent will become one of two

major corporate shareholders.

The Chinese Internet giant invested 72 billion won (US\$70 million) in Kakao and secured a 13.02 percent stake in the top messaging company in April 2012. The value of Tencent's stake that increased through the M&A deal is estimated to be 336 billion won (US\$328 million).

The deal is significant in that the Chinese Internet firm will be able to expand its reach to the local online market, aside from the fact that the transaction actually resulted in a five-fold increase in investment profits. A vice president of Tencent Games is going to become one of nine newly-appointed directors at the 2014 Annual General Shareholder Meeting, which will be held in August. As a result, Tencent will be



able to exert leverage over not only the mobile business of Daum-Kakao, but also the online business.

According to industry sources, other Chinese companies have recently been expanding their influence by increasing their investment in Korean venture firms or creating local venture businesses by themselves.

Last month, Tencent obtained a 28 percent stake in CJ Games by injecting 533 billion won (US\$521 million). Alibaba, China's leading e-commerce company, established a local branch in April. ®



Wearables Business

Samsung Accounting Just for 23% of Global Smart Band Market in Q1

According to US-based market research firm Canalys on June 1, Samsung Electronics captured 23 percent of the global smart band market in the first quarter of this year, which placed the company in the third spot after Pebble Technology (35 percent) and Sony (29 percent). Total smart band shipments in Q1 are estimated at 2.7 million units.

The Korean tech giant recently quoted a report released by Strategy Analytics (SA) saying that it comprised 70 per-

cent of the worldwide smart watch market by selling 500,000 units during the period. The number appears to only be the figure for smart watches. Samsung still lags far behind Sony in the smart band market. If wearable bands like Fitbit are included, the Korean firm's market share is much lower.

However, as the Gear 2 and Gear Fit released in April have received a warm response from the market, the company's market share is expected to grow. According to SA, Samsung's share of

the smart watch market was 52.4 percent last year, but it is approaching 70 percent this year.

There are three kinds of wearable bands: complex accessories, smart accessories and smart wearables. Complex accessories include low-priced and basic fitness bands like Fitbit, which are likely to lead the market by 2018. In contrast, demand for smart accessories like the Gear 2 and Gear Fit are expected to grow rapidly after 2018.

Wearable Ecosystem

Samsung Striving to Foster New Ecosystem of Wearable Devices





Samsung Electronics held its first application development conference for the Samsung Gear 2. Although the number of the participating developers was relatively small, many new creative ideas for new user experience were found there for better utilization of wearable devices.

The conference, titled Samsung Gear 2 Hackerthon, took place in Seoul between May 24 and 25, and a total of 130 developers from 32 teams joined the event. The Wearable Tizen SDK and the Samsung Mobile SDK were employed in their free-form development of dedicated applications.

The gathering for the development of wearable device applications is the first one of its kind in the world, and is very meaningful in that the Tizen OS was first in line. Google has encouraged such development activities since the release of the Samsung Gear 2 by unveiling the Android SDK for wearable devices. The Google I/O, scheduled for next month, covers the wearable ecosystem, too.

The Malibu team won the highest prize at the Samsung Gear 2 Hacker-

thon. The team came up with a portable score application, which shows the chords of a song in play on the screen of the wristband and comes with a metronome function.

Google and Apple are expected to jump into the market led by Samsung Electronics sooner or later. They already have sharp competitive edges in device manufacturing, platform management and contents and thus can get the inside track in the formation of the new ecosystem, which could result in at least some nervousness on the part of Samsung Electronics.

The Samsung Gear 2 Hackerthon and similar conferences are also scheduled in the United States, Brazil and other countries. The Samsung Gear 2 Application Contest is currently underway, too.

New Wearables

Idea-oriented SMEs to Take Initiative in Ecosystem for Wearable Devices

Once the era of the wearable market, which is cited as the next smart phone market, arrives, idea-oriented small and medium-sized enterprises (SMEs) are likely to grow more than large companies that produce a small number of items in large quantities. Some in the industry say that those SMEs could lead the market, as it is possible to have strengths in both IT, which is the core technology of wearable business, and the fashion and textile industries.

"In the case of wearable devices, there will be a market for electronic devices based on IT such as Samsung and Google, as well as a textile-based market that provides new-concept devices based on design and fashion," said Dr. Han Sang-chul from the Korea Evaluation Institute of Industrial Technology. His remarks were made at the System Semiconductor Breakfast Seminar held in EL TOWER, Seoul on May 29. He added, "At first, large companies will lead the wearable market, but the ecosystem led by SMEs is expected to be formed later, as there will be a market for custom-made styles and designs."

Dr. Han also pointed out that the advent of the wearable market may reverse the current market structure in which large enterprises produce finished goods and SMEs supply parts and com-

Samsung's concept art for a wearable digital device that works as a glove.

ponents.

In addition, he stressed that as it will be possible for various wearable devices to be available in the wearable market, the country that takes the initiative in the construction and standardization of an open-source platform is more likely to lead it.

In fact, the local textile industry is working to develop smart wearable textiles. If the semiconductor industry joins the efforts, smart textiles can be developed much sooner.

IT-incorporated Fashions

Fashion Firms Releasing New Products Incorporating Information Technology



Pashion companies are using advanced technology for product design and features as well as the development of functional fabrics. For example, they are adopting big data to analyze the preferences of consumers and combining information technology with materials intercepting electromagnetic waves.

Samsung Everland's SPA brand "8seconds" has recently released hot pants suiting the body types of Asian women by utilizing sales-related big data. The company found out the most preferred lengths and materials through analysis of its data on the top 40 types

of hot pants sold out last year, and the designers carried out repeated tests to reach a conclusion that pairs of pants with a length of 27 cm look best on Asian women. They applied the results to new products for this summer, which are enjoying at least 10 percent higher sales compared to the same period of last year.

Samsung Everland reflected the taste of young players as well in designing the uniform of the Korean national soccer team. The uniform comes with a mobile phone pocket and an earphone holder inside the jacket, allowing for the frequent use of earphones while moving from place to place.

Renoma Sports released women's golf pants for a better hip line. The Apple Hip Lifting Pants have a back pocket at a position slightly higher than the hip, so that the legs look longer than

they are

In the meantime, KOLON Sports hit the market with outdoor jackets and sneakers combined with information technology. The Lifetech Jacket Version 7 can maintain the body temperature of a wearer in distress until rescue. It incorporates HeaTex, a type of heat-generating fiber using conductive polymers, so as to generate heat of 35 to 50 degrees Celsius. It can charge smartphones and electronic appliances as well.

Adidas' Adizero F50 Runner 2 is designed to measure and record all of the behaviors of the wearer. The My Coach Speed Cell, which is a small smart chip, is positioned in the sole to record the wearer's exercise duration, distance, maximum speed, and sprint frequency for up to eight hours. The data can be transmitted to and shared on an iPhone, iPad, a computer, etc.

Good Responses

G3 Receives Warm Response for

Resolution, Camera, Design

Legal Electronics' new flagship smartphone has been well received by overseas IT news sites.

Much attention is being paid to whether or not LG could become a top-notch smartphone manufacturer through the G3. The second largest Android smartphone maker is currently behind Samsung and Apple in brand recognition, and is also at a disadvantage compared to Chinese handset makers in price competitiveness. About 170 carriers worldwide will sell the G3 this summer. In particular, LG is considered to have succeeded in making the introduction of its new product the talk of the town by simultaneously hosting product-launch events in six cities around the world — London, New York, San Francisco, Seoul, Singapore, and Istanbul.

The newly-launched smartphone has been met with a warm response from many overseas IT news sites, and the world's first QHD resolution and hardware specs of the handset were highly praised by foreign news outlets. The G3 was also favorably reviewed for its camera functions and design.

IT news site CNET reported, "The G3's display is extremely impressive, and appears to float almost impossibly close to the top of the glass," adding, "Photos I examined in my brief hands-on time were packed with color and looked great." Giz-



modo, a website that specializes in technology, said, "The G3 has very competitive hardware that is fit for a smartphone with highest quality," adding, "LG's G3 has a big 5.5-inch display, but it doesn't feel at all like a clumsy giant — it's more of a sleek beast; a station wagon that handles more like a sports car." Phone Arena and TechRadar also praised the various colors and design of the device, which gives an impression that it's made of metal, even though it looks and feels like plastic.

LG anticipates that it will be able to sell over 10 million G3 units for one year. Previously, it sold 2.5 million units of the G1 and 6.1 million units of the G2. The reason that the Korean tech giant has high hopes for its new handset lies in differentiated technical skills. The QHD display of the G3 shows objects on screen more clearly and vividly, promising four times the resolution of existing high-definition displays, and twice that of Full HD displays.

An industry analyst remarked, "The G3 is expected to be the main model of major carriers in the U.S., like Verizon and AT&T. So, LG's share of the North American market is likely to increase from 8.6 percent last year to 10 percent this year." @

Buying Decision Factor

Camera Specs to Decide Smartphone Sales

With LG Electronics releasing its flagship smartphone G3, the local premium smartphone market seems to be turning into a four-way battle. Four different recently-launched premium smartphones are showing off cameras with different technical specifications.

According to industry sources on May 29, a laser autofocus sensor is placed on the back of the G3, which allows the G3 camera to measure the subject-to-camera distance and to automatically focus on the subject very quickly with the aid of the laser beam. An f2.0 angle lens is used to receive more light so that it is possible to take bright pictures in low-light mode. The camera is also equipped with OIS+, which supports 20 percent improved image stabilization compared to OIS. The new OIS+ technology combines both optical and electronic image stabilization.



Samsung's Galaxy S5 is equipped with a 16-megapixel camera that can capture important moments of people's daily lives by radically reducing the time needed for auto-focusing. Through Rich Tone HDR mode, people can shoot pictures with life-like colors even in a dark place or against light.

Pantech's Vega Iron 2 features a wide-optical image-stabilizer camera that supports a top-class correction angle, and thus it is possible to take clearer pictures. An f2.0 lens enables users to take bright and clear pictures in the dark, also.

Sony's Xperia Z2, which overcame the limits of smartphone cameras using a large number of innovative technologies, is fitted with a 20.7 megapixel Exmor RS image sensor for mobile, a G Lens that pulls in more light in dark conditions, and a BIONZ for mobile image processing.

First Tizen Phone

Samsung Electronics to Release Samsung Z

amsung Electronics announced on June 2 that it is scheduled to unveil its first smartphone running the Tizen operating system (OS) during the Tizen Developer Conference on June 3.

The Samsung Z is equipped with a 4.8-inch Super AMOLED panel with 720p resolution and a quad-core processor running at 2.3GHz. Using improved functions of the Tizen OS that manages memory, it takes less time to turn the device on, and multi-tasking is more smooth as well.

The Korean tech giant explains that 2D videos and 3D content can be played back without buffering thanks to its advanced web graphics technology.

Fitted with a fingerprint sensor just like the Galaxy S5, Samsung's latest smartphone comes in black and gold, and the new handset is expected to be available in Russia first sometime in the third quarter of this year.

Samsung is also going to open a



The Samsung Z, the first Tizen-based smartphone

Tizen app store.

Based on HTML5, the open-source Tizen OS was developed by the Tizen Association, with Samsung and Intel leading the development efforts.

Previously, the Korean tech company used Tizen OS in its smart watches and smart cameras, and it plans to unveil Tizen-based smart TVs in the future. ®

Tizen Smart TV

Samsung Electronics Unveils SDK for **Tizen Smart TV**

Samsung Electronics will unveil the Tizen software development kit (SDK) for TV in order to use the smartphone OS in TVs. LG Electronics' first Web OS-based TV released this year has broken the one million mark in sales volume. A new breeze is blowing in the field of smart TV OS development.

Samsung Electronics announced

on June 1 that it will unveil the beta version of the SDK at the Tizen Developers Conference scheduled between June 2 and 4 in San Francisco. Supporting the HTML5 standard, it can be employed to develop applications running on Tizen OS-based TVs.

"It is the indus-

try's first virtual TV development interface on which the TV screen is shown as it is, which means developers can do their work handling all of the functions of the TV even when the TV is absent during the development process," Samsung explained.

The kit comes with device debugging as well so that developers can



detect problems with their applications and correct code remotely on PCs without having to be connected directly to the software in the TV.

The full version of the SDK, which is slated to be available in the second half of this year, allows applications of more sophisticated animation and design

> to be made on the HTML5 standard and the Caph framework. It also supports smart interaction and multiscreen functions, too. The former is to operate the TV with simple hand gestures and voice, and the latter is for interlinking between the TV and various mobile and wearable devices. @

Decade Award

KIST Releases 10-year Achievement of Center for Intelligent Robotics

The Korea Institute of Science and Technology (KIST) announced on June 3 that the Center for Intelligent Robotics was successful in commercializing core technologies related to intelligent robots that were developed over the last 10 years.

According to KIST, the Center for Intelligent Robotics has succeeded in distributing 20 units of Elder Care Robot "SIL-BOT 3.0," Info Service & Performer Robot "MERO S," and a software development kit (SDK) to not only the nation's major universities and research centers, but also overseas facilities. These facilities include senior welfare centers in Denmark, elementary schools and universities in India, and the Russian State University. The distribution has been taken care of through Robocare, a start-up enterprise established by KIST. Information about intelligent robots and related core technologies are available at digital library "Robotorium" (www.robotorium. re.kr).

SILBOT 3.0 is a platform that can meet economic feasibility and the versatility in the intelligent robot industry. The platform has been strengthened with SDK and related systems. It can be used for educating children and providing services to the elderly. It can also be utilized as a material for research purposes, providing more diverse expressions and a system development environment (SDE).

The MERO S was developed to study and use communication between humans and robots. It is ideal for service guides and research, and it can also be used to maximize interactions with autistic children. More advanced robots are going to be released soon.

The most notable characteristic of hardware is a freely-moving joint motor, which allows robots to move like humans, and enables plenty of facial expressions. When approach by people, those robots stop moving momentarily, or circumvent people after figuring out where they are. A 360-degree rotating, speedy, accurate, and low noise omniwheel was used. In addition,



The SILBOT 3.0, designed to take care of elderly patients.

more than 30 verified software technologies were used, including a technique that allows free conversation with users and a method that enables face-to-face and voice communications. Those technologies are optimized for the development of applications for service robots, which are used for providing English education, training old people to improve their cognitive ability, or educating children with special needs.

The SDK makes it possible for software developers who are not used to robots to implement their own applications via computers without robots, using a graphic simulator provided in a kit. Through the robot motion editor where motion capture technology is mounted, the simulated movement of robots can be created automatically in an easy and fast manner. On top of that, using the convenient user environment of a "Mission Planner" (an intelligent robot software platform), it is possible to easily program a process for robots to accomplish missions.

Interest in Korean Robots

Google Fails to Acquire Korean Robotics Venture

oogle reportedly made a failed attempt in November last year to take over Rainbow, a local robotics research company affiliated with the Korea Advanced Institute of Science and Technology (KAIST). Established in 2011, Rainbow manufactures Hugo 2, which is a well-known rescue robot.

What is noticeable is that it was Andy Rubin who made the proposition. He currently oversees the entire robotics development strategy of Google. In November 2013, Google rushed into the robot industry by acquiring eight venture firms such as Schaft. This implies that Google thinks highly of Korea's



robotics technology.

Andy Rubin is said to have intended to offer millions of dollars for the source code of Rainbow's robot. However, Rainbow turned down the offer and Google had to be content with buying just two units of the Hugo 2. "We made no reply when Mr. Rubin offered to move Rainbow to Silicon Valley and share the source code for the joint development of robots," said Oh Joon-ho, vice president of KAIST, adding, "I came to realize that the offer was to buy the company when I met him again later." ®



Next Smart War

Apple to Start M2M Business Competing with Samsung, Google

A pple has jumped into machine-to-machine (M2M) related services such as healthcare and smart home services by showcasing iOS8, which is a new mobile operating system. The industry is paying attention to whether or not there will be another smart war, as the US-based tech giant that leads the mobile trend has started to compete with Google and Samsung Electronics to dominate the M2M market.

Apple unveiled new software-related technologies and services in the Apple Worldwide Developers Conference (WWDC) 2014 held at the Moscone Center, San Francisco on June 2 (local time).

In particular, iOS8 received a lot of attention because it is equipped with healthcare and smart home-related new functions, which makes it possible to predict Apple's future direction in Internet of Things (IoT)-related services.

Due to the showcasing of M2M-related services by Apple, competition in the market is likely to heat up. According to the National Information Society Agency, the global M2M market is expected to be worth about 9 quadrillion won (US\$8.9 trillion) by 2020. An increasing number of the basic essentials of life, from clothing to household appliances, feature communications nowadays.

The strategy is quite similar to that of Samsung Electronics. Earlier this year, Samsung unveiled a smartphone and smart watch application for the integrated control and monitoring of washing machines, air conditioners, refrigerators, smart TVs, etc. The smart home application is available on a smart phone running on the 4.0 or higher version of Android and the Samsung Gear 2 and Gear Fit based on the Tizen operating system.

Samsung Electronics is going to unveil its own smart home protocol so as to set up an open-source smart home ecosystem. To this end, the company has worked with the other subsidiaries in the same group, such as Samsung Techwin, Samsung SDS and S One, and entered agreements with Honeywell and Belkin. Samsung Electronics also introduced the Galaxy S5 fitted with many health-related functions including a heart rate sensor and an S Health app. The company also revealed its digital health strategy. Since the Korean tech giant has a lineup of various home appliances, the firm is considered to have great potential in the M2M field. Samsung Electronics is planning to open the protocol at the developers' forum in November and demonstrate it at the Consumer Electronics Show (CES) 2014 in January next year.

Other global IT companies and consumer electronics manufacturers are jumping on the bandwagon, too. Google is also accelerating efforts to dominate the related market, as seen by its acquisition of home gadget maker Nest Labs for US\$3.2 billion in January this year. The search engine giant is expanding its M2M technology to vast areas of people's lives, as shown by the launch of Google Glass and Google's driverless car.

LG Electronics released the Home Chat service last month, which allows household appliances to be controlled with a mobile messenger. LG is planning to apply Home Chat to refrigerators, light wave ovens and the like.

Observers say that as global enterprises are actively seeking to provide M2M-related services through the communication between a smartphone and another device, M2M will be the biggest arena of competition.

Changed Appetite Import Car Market



Volkswagen's Tiguan 2.0 TDI, the best-selling import car in May.

The sales of imported cars went rather slow in Korea last month. However, the explosive uptrend continued all in all.

According to the Korea Automobile Importers & Distributors Association (KAIDA), a total of 15,314 imported cars were newly registered in May this year to record an 8.4 percent decline from a month ago. The monthly figure, which was 13,852 in February, continued to increase in March and April. The number reached 16,712 in April to record a new high in history. "The 8.4 percent drop can be attributed to the

shortage of inventory on the part of some importers and the less business days due to the May holiday season," said KAIDA senior managing director Yoon Dae-sung.

Nevertheless, the sales volume showed a 14.2 percent increase when compared to the same period of last year. The cumulative sell-through for the first five months of this year amounted to 76,460, 23.9 percent higher than a year earlier.

Last month, a total of 3,212 BMWs were newly registered in Korea, followed by Volkswagen (2,690), Mercedes

Benz (2,479), Audi (2,047), Ford (671), Mini (601), Toyota (581) and Lexus (505).

By country, European models topped the list with the total of 12,534 (81.8 percent) while Japanese (1,736, 11.3 percent) and U.S. (1,044, 6.8 percent) followed them. By fuel type, diesel cars (10,275, 67.1 percent) were on top of the chart, followed by gasoline (4,392, 28.7 percent), hybrid (640, 4.2 percent) and electric (seven, 0.0 percent).

Better Sales

May Car Sales Continue Positive Trend

Even though the recent ferry disaster in the nation has weakened consumer confidence, local auto makers saw monthly sales figures rise in May, thanks to the introduction of new models.

According to industry sources on June 2, Hyundai Motor Company sold 414,961 units last month, a 3 percent year-on-year gain. The number for the

local market was 59,911 units, a 3.4 percent year-on-year increase, and the figure for the overseas market was 355,050 units, up 2.9 percent from the previous year.

Kia Motors showed poor performance in the local market, but achieved a similar level of performance in the overseas market. To be specific, it sold 36,252 units in Korea, down 8.2 per-

cent from a year ago. Its overseas sales climbed 1.5 percent year-on-year to reach 217,366 units last month.

GM Korea had an increase in car sales in the local market last month, helped by good performance of the Chevrolet Spark and the Chevrolet Malibu Diesel. It sold 52,795 in total, a contraction of 22.8 percent year-on-year, but saw a 5 percent year-on-year increase in

domestic demand (2,405 units).

Renault Samsung Motors, which became the nation's fourth-largest automobile manufacturer once again last month, also showed an increase in sales. Its domestic sales increased 60.8 percent year-on-year to reach 7,400 units, and its monthly exports reached 6,132 units in May, up 23.4 percent compared with the same period last year. Its sales volume increased by 41.4 percent to reach 13,532 units last month.

Ssangyong Motor, which is not going to release any new models by next year, is struggling in the market. It sold 12,078 units last month, with domestic sales of 5,271 units and overseas sales of 6,807 units. Although domestic sales remained the same last month, but its total exports shrank 8.8 percent



GM Korea sold 52,795 cars in the local market last month, helped by good sales performance of the Chevrolet Malibu Diesel.

compared to the same period last year. Ssangyong Motor is planning to increase sales through various kinds of marketing

activities prior to the launch of its new compact SUV named X100 next year.

Diesel vs. Hybrid

Popularity of Hybrid Cars Rising in Korea

Hybrid vehicles are increasing their presence in the domestic automobile market. The hybrid models of Hyundai Motor Company, Kia Motors, and Japanese automakers are increasing their sales at a rapid pace amid the popularity of German diesel cars.

The Hyundai Motor Group added the Grandeur Hybrid and the K7 Hybrid 700h to its lineup late last year and early this year, respectively. The sales volume is on the rise as well. Specifically, the group sold 10,361 hybrid cars during the first four months of this year, 32.1 percent higher when compared to the same period of 2013. The monthly sales volume of the Grandeur Hybrid is at around

1,400 to 1,500, which is twice to three times those of the Sonata Hybrid and the K5 Hybrid.

The hybrid vehicles of Hyundai and Kia are enjoying increasing popularity in overseas markets, too. The Sonata Hybrid and the K5 Hybrid set new sales records in March in the U.S. Under the circumstances, the group's share in the U.S. hybrid car market is about to reach a double digit. The market share had

been just 6.2 percent and 7.2 percent in 2012 and 2013, respectively.

Kia Motors' K7 Hybrid 700h.

In the meantime, Toyota Korea is planning to further boost the sales of its seven hybrid models, two being Toyota and the others being Lexus. The combined sales volume increased 16 percent from a year ago to 1,932 units between January and April. The vehicles account for 52 percent of Toyota Korea's total sales volume for this year.

Hyundai Motor in Russia

Hyundai Motor Group on Winning Streak in Russian Car Market



Hyundai Motor Company and Kia Motors are on a roll in Russia while Ford, which was the number one in the local market, is in the face of a halt in production and layoff.

Ford used to be the largest foreign automaker in Russia between 2004 and 2008 and the popularity of its main models such as the Focus was extremely high to the point of undersupply.

However, according to the KOTRA's trade center in St. Petersburg, Ford Sollers that is located in Leningrad laid off 600 employees in April and is going to dismiss 100 more this month. The plant, which manufactured Focus, Mondeo and the like, has been shut down since April. The company sacked 430 workers in 2013, too. They were relocated to Sollers' factories in other regions or partner firms.

Ford explained that the business curtailment was due to the extended Ukraine crisis and the rapid drop in the U.S. dollar-ruble exchange rate but the explanation is not that persuasive

because the local production volumes of Hyundai, Toyota and GM fell by just 3 percent year on year during the same period.

The sales volume of the Ford Focus was almost halved from 16,732 to 8,374 between the first quarters of 2013 and 2014. The Association of European Businesses in the Russian Federation (AEB) recently announced that Ford's sales ranking fell from first to fifth between 2010 and last year. In 2010, the U.S. automaker had sold no less than 67,041 cars in Russia.

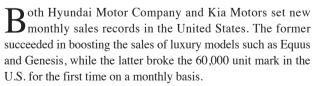
It is the Solaris of Hyundai's local brand that took the place of the Focus. The model made its debut in the local market four years ago and snatched the top spot in just three years with a sell-through of 113,991 units. Kia Motors jumped from the eighth to third place between 2010 and 2013 by boosting the sales from 29,165 to 89,788 units, too.

The Hyundai Motor Group is overwhelming the others in the size of investment in local production facilities as well. Hyundai Motor Company, which entered the Russian market in 2010, has invested US\$500 million in the automobile manufacturing facilities in St. Petersburg. It is followed by Ford (US\$300 million since 2002), GM (US\$300 million since 2008) and Toyota (US\$270 million since 2007).

"Today's Russian automobile market is one of the hottest in the world and global automakers are renewing their local marketing strategies over and over," said an industry source, adding, "It seems that Hyundai and Kia hit the mark there by looking well into the economic conditions and personal preferences and making timely changes."

Record High Sales in US

Hyundai, Kia Set New Sales Volume Records in the U.S.



Hyundai Motor America announced on June 3 (local time) that it sold 70,907 units of cars last month, 3.7 percent higher from a year earlier, and even higher than the previous monthly record of March last year at 69,728. In particular, the sales volumes of the Equus and the Genesis jumped 26 percent and 24

percent from the preceding year, while all of the other models, ranging from compact cars to SUVs, also enjoyed growth.

dai Motor's Alabama production p

Kia Motors America set a new record as well by selling 60,087 vehicles, which is 14.8 percent higher when compared to the same month of 2013. This is the first time since the beginning of its business in the U.S. 20 years ago that Kia sold more than 60,000 cars there in a single month. The Optima (16,843 units) and the Soul (15,606 units) led the growth in sales.

Winning Awards

Hyundai Mobis Receives World's Largest In-house Magazine Award 2nd Year in a Row



Hyundai Mobis' in-house magazine received the platinum prize from Inspire Award, hosted by the League of American Communications Professions LLC (LACP), two years in a row.

Inspire Award is a competition in which in-house magazines from all over the world gather to be evaluated on their effectiveness in facilitation the internal communication within their companies. This year's competition hit more than 600 applicants, the highest since the contest began in 2001. This year, Hyundai Mobis ranked fourth, which is up four notches from last year. It is the first company in Korea to receive this award, and it has now received it for two consecutive years.

Hyundai Mobis submitted its sixyear-old bimonthly global in-house magazine to the competition. The magazine is targeted at non-Korean employees from overseas corporations, so the content is customized to suit their needs, including being published in English and Chinese. It is being distributed to 35 overseas corporations in 19 countries around the world. The magazine covers news about the overseas corporations and content on diverse lifestyles, and holds events every year, gaining positive feedback from non-Korean employees.

This year, Hyundai Mobis received a score of 99 out of 100, the highest in eight categories including design, readability, content, and focus. Also, it received a special prize called, "The Most Inspiring In-house Magazine" for its useful and strong content. Christine Kennedy, the main judge at LACP, praised it by saying, "a magazine that has superior readability and clear content, wrapped up with creativity, deserves to be recognized."

Along with Hyundai Mobis, worldfamous companies like Volkswagen, Bentley, and Bosch also received a platinum prize, and other world-renowned groups like Allianz Group earned the follow-up gold prize.

Hyundai Mobis Director Jang Yoon-kyung said, "A global in-house magazine is a great way to communicate freely among non-Korean employees, and it helps raise the level of understanding of other cultures as well as share a company vision to improve loyalty towards the company," and, "we will do our best to contribute to reach the top five global auto parts manufacturer ahead of our goal time with our outstanding internal communication power."

LACP is a research institute that provides PR strategy and consulting, and holds the contest which evaluates and awards internal communication materials such as sustainability reports, company profile brochures, and in-house magazines.

Kia Represents

Kia Motors Transporting the World Cup



Ia Motors, the official automotive partner of FIFA, conducted a handover ceremony today at Arena de Sao Paulo in Sao Paulo, Brazil for the supply of a fleet of official vehicles to ensure the smooth and efficient transportation of teams, officials, delegates and official VIP visitors from all over the world during the upcoming 2014 FIFA World Cup Brazil.

"This year's World Cup marks Kia's consecutive participation as a sponsor of the world's most popular global football competition," said Soon-Nam Lee, Vice President of the Overseas Marketing Group, Kia Motors Corporation. "We are truly delighted to continue our active involvement in the tournament, as we believe football marketing is an integral part of our vision to elevate Kia's global brand awareness to the next level and to ultimately become a formidable player on the global automotive stage."

The company will also a roadside assistance team on call 24 hours a day for emergency services. They can be reached via a number on a hotline sticker that will be placed in each official car.

At the handover ceremony, FIFA secretary general Jérôme Valcke said, "A flawless transport operation is critical to the success of the FIFA World Cup. We are delighted to have the support of our Partner Kia Motors, who's provision of the fleet of vehicles ensures that all event participants and crucially the teams travel in style and comfort."

The automaker also prepared the Kia Fest for large-scale street cheering in major cities in the 16 countries including

Germany and Spain while distributing T-shirts to cheering parties from June 10.

In the meantime, Kia Motors ranked 3rd in the 20 high-volume brands, just below Toyota and above Chevrolet and Honda, which was unveiled on June 18 in the "Initial Quality Survey in 2014" announced by the US-based market researcher J.D. Power.

Kia's Sportage R came first in the compact SUV segment, with its Cadenza topping the full-size category. The Sportage R got top points last year as well.

The survey was conducted in a way to investigate customers' initial quality satisfaction on 233 items of cars which were purchased in the US from November 2012 to February this year, but before three months. J.D. Powers checked 207 car models for the 2014 report.





As Korean builders successfully received construction orders from Middle Eastern countries like Kuwait and Iraq early this year, the total amount of overseas orders surpassed US\$30 billion. As a result, the government predicts that the nation will reach its target of US\$70 billion in 2014.

According to the Ministry of Land, Infrastructure and Transport (MOLIT) and the International Contractors Association of Korea (ICAK) on May 28, the amount of overseas orders obtained by local builders from Jan. 1 to May 27, 2014 equaled US\$30.926556 billion. This is the second case where the

amount surpassed US\$30 billion before June.

Previously, the nation saw the number exceed US\$30 billion on April 7, 2010, which was the earliest, helped by a US\$18 billion deal for a nuclear power plant in the United Arab Emirates (UAE). An ICAK official said, "The year of 2010 was a special case where a nuclear power plant in the UAE alone approached US\$20 billion. So, it is the first time for total overseas orders to exceed US\$30 billion in a short period of time."

The combined amount so far this year is a 32.6 percent year-on-year gain

from the previous year (US\$23.317865 billion).

By region, orders obtained from the Middle East amounted to US\$24.586356 billion, accounting for 80.51 percent of the total, and Asia (US\$4.520684 billion, 14.62 percent), Latin America (US\$1.155485), and Africa (US\$489.554 million) followed. By industry, orders for industrial facilities reached US\$26.59461 billion, making up 85.99 percent of the total, followed by civil engineering projects worth US\$2.13124 billion, and the US\$1.453426 million of construction projects.

Kuwaiti Huge Project

Korean Builders Expected to Hit Another Jackpot in Kuwait

Bird's-eye view of the world's largest oil refinery plant in Al Zour in southern Kuwait

Korean construction companies, which won US\$7.1 billion worth in orders last month with a US\$12 billion project in Kuwait, are poised to repeat the winning streak.

On May 28, the Kuwait National Petroleum Company announced the list of the six consortia that passed the preliminary screening for the New Refinery Project (NRP), which will be underway on an EPC basis. The project is to build the world's largest oil refinery plant with a daily capacity of 615,000 barrels in Al Zour in southern Kuwait. The project is divided into three packages. The first one, worth US\$4.5 billion, is to build

distillation, residue oil desulfurization, and hydro-treatment facilities. The second package is to set up hydrogen and sulfur recovery facilities at an investment of US\$2.3 billion. Power supply and auxiliary facilities for the oil refinery are constructed through the other one worth US\$2.2 billion.

The six consortia are as follows: GS Engineering & Construction, SK E&C, and JGC; Samsung Engineering, Petrofac, and CB&I; Daewoo E&C, Hyundai Heavy Industries, and Fluor; Hyundai E&C, Hyundai Engineering, Daelim Industries, and Saipem; Hanwha E&C, Tecnicas Reunidas, and Sinopec; and

KBR and HOCEC.

In the meantime, the three packages of the KNPC's Clean Fuel Project launched in April were won by the GS and SK E&C consortium (US\$4.82 billion), the Samsung Engineering consortium (US\$3.78 billion) and the Daewoo E&C consortium (US\$3.4 billion).

The contracts for the NRP are expected to be signed in the first half of next year after bids through six months of preparation. The construction process is scheduled to be completed in February 2019.

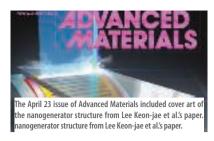
Nanogenerators

Korean Team Discovers Method to Commercialize Highly-efficient Nanogenerators

A Korean research team successfully developed a method to make a nanogenerator that can be used as a source of power for wearable devices.

The Korea Advanced Institute of Science and Technology (KAIST) announced on May 15 that a research team led by Lee Keon-jae, professor of the Department of Materials Science and Engineering at KAIST, succeeded in developing a new technique to make a nanogenerator that is 40 times more efficient using a laser lift-off technique and a piezoelectric thin film.

A nanogenerator is a device that can produce electricity by applying a small



amount of pressure to a flexible nanomaterial or by bending the material itself. Since the generator can supply electricity to devices without wires or batteries, it can be utilized as a source of energy for flexible devices, small devices placed in the body like cardiac pacemakers or medical micro- or nanorobots.

Nanometer Images

Big Research Breakthrough Lets You See Tiny Things

A local research team developed a nano-optic lens that lets people see objects smaller than 160 nm in size, about 625 times smaller than a human hair.

The Electronics and Telecommunications Research Institute's Creative Research Center Graphene Electronics team led by Choi Choon-gi announced on April 28 that their research was published in the global academic journal "Nanoscale", published by the Royal Society of Chemistry. The team proved that by using a platinum-coated carbon nanotube lens and shooting a 532 nm green light, the shape of two bars 160 nm apart can be clearly seen.

With current optic microscopes, even at maximum magnification, due to the limitation of the light, objects of under 200 nm in size (500 times smaller than a human hair) cannot be seen.

Also, in case of an electron microscope or X-ray, the specimen needs to be cut or coated to be observed rendering it impossible to reuse.

However, this research opened the

way to see objects smaller than the size of 160 nm without processing it, igniting further development in nano-scale research. Also, on the back of the newly-developed technology, it will be possible to get one step closer to seeing a molecular structure with the naked eye.

However, its commercialization will take time, in that there is a need to secure further technology that enables one to see shapes other than bars.

The team transferred a highly-efficient piezoelectric thin film that was crystallized at a high temperature from a hard substrate to a plastic one and created a nanogenerator on the $2\times2cm$ flexible substrate using a commercialized laser lift-off technique. As a result, the efficiency of the device was greatly improved, and the possibility of mass-production also increased. The nanogenerator was able to operate 105 LED light bulbs with 250V and 8μ A of energy by slightly bending the device.

Professor Lee explained, "The newly-developed nanogenerator can be used as a source of energy without a limit, since it is capable of generating electricity utilizing natural energy resources like wind, vibration, or sound, as well as biomechanical energy from the human body through heart beats, blood flow, or the contraction and relaxation of muscles."

The research findings were published online in the April 23 issue of Advanced Materials, a weekly scientific journal covering materials science.

Mobile Security Chip

Korean Research Team Develops Security Chip for Smartphones

A mid growing worries over financial information theft and the leakage of personal information using smartphones, a method to produce a security chip that can foil smartphone hacking was developed.

The Electronics and Telecommunications Research Institute (ETRI) announced on May 22 that it successfully developed a technique to make MeeMo, a security chip for smartphones that can prevent personal information stored on the phone from being leaked, including accredited certificates and passwords.

The newly-developed chip provides password protection, allows secure information storage and electronic sig-

natures, and verifies the integrity of the terminal system. Hence, it can stop critical information leaks on a



smartphone through hacking, phishing, or pharming.

The 5x5mm chip is based on the Mobile Trusted Module (MTM), a hardware-based trust anchor for mobile phones and devices. ETRI explains that the installation of the chip in the smartphone can guarantee smartphone security, since important information is stored inside the module.

When a hacker penetrates a smartphone with mobile malware, the chip compares falsified information with the original, helped by stored information like accredited certificates and passwords. By doing so, it can detect the penetration of the hacker, and notifies the user of the incident when it occurs. In other words, the chip can prevent a smartphone platform from being changed through hacking, and thus detect and block the execution of mobile malware beforehand.

The new chip was designed for Android phones, and ETRI already transferred related technologies to two companies that offer security services for smartphones. It has also filed 30 patents at home and abroad. ©

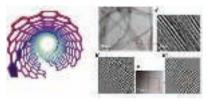
New CNT Structure

Korean Research Team Confirms that Carbon Nanotubes Can Have Helical Form

The Korea Institute of Science and Technology (KIST) announced on June 9 that a research team led by Dr. Lee Jae-gap from the Interface Control Research Center at KIST found some single-walled carbon nanotubes (CNTs) that are not a single layer graphene cylinder, but a graphene helix.

CNTs are the strongest, lightest and most conductive material known: they are 100 times as strong as steel, and their electrical conductivity and heat conductivity is similar to that of copper and diamond. Therefore, they are hailed as a next-gen dream material that can be utilized in various industries such as semiconductors, airplanes, and cars.

When the material was first discovered by Japanese researcher Sumio Iijima in 1991, CNTs were believed to have a cylindrical structure in which hexagons composed of six carbon atoms are interconnected.



Right: A model of a tube-shaped graphene helix. Left: The structure of graphene. Cracks can be seen.

However, the research team found some CNTs that do not have a cylindrical structure but a helix, after conducting a detailed analysis using an electron microscope with a high resolving power and an atomic force microscope. A nodal structure formed by helical cracks is evidence for this theory. The team also said that this may be true for all CNTs.

Dr. Lee remarked, "The outcome of our study is likely to create a stir in the academic circles of physics and nanomaterials, since it will be necessary to modify numerous research findings that have been done over the past 20 years."

Basic Fashion Tech

Korea Develops Tech to Manipulate Characteristics of Carbon Material to Change Color of Clothes

Each morning a professional woman picks up a scarf in a hurry without searching through her closet, since she can change the color of her clothes by pushing a button. An office worker is wearing the wrong outfit for an official event, but can instantly be dressed in formal attire by typing a preferred design into a window inside the clothes.

The story is not part of some episode of a sci-fi cartoon. It is about the world that people will face soon, and it is not about a vague future but a reality becoming clearer bit by bit through scientific and technological advances.

Kim Sang-wook, professor of the Department of Materials Science and Engineering at KAIST is one of the scientists who is trying to make the cartoon-like story a reality. He won the prize by developing a method to change the nature of next-gen carbon materials. His research has increased the possibility of carbon materials to be used in clothes, and has contributed to a big change that is likely to happen in the future.

Professor Kim conducted various experiments in solar cells and batteries, and found that it is possible to get a much more advanced new material using his own techniques. The professor remarked, "Thirty years ago, the notion that people would carry their phone sounded like a science-fiction story. But it became reality," adding, "In 20-30



Kim Sang-wook, professor at KAIST (left) explains a chemical theory to his students.

years, people will be able to change the design or color of their clothes, since batteries and sensors will be embedded in them."

The research findings were published online early this year in a special edition of Advanced Materials, a weekly scientific journal covering materials science.

K Shop 2014

Retail Exhibition to Open in September at KINTEX

Korea's only international shop and retail exhibition, K Shop 2014, is going to be held in KINTEX, the largest exhibition center in Korea, from Sept. 25 to 27.

Focusing on the Asia-Pacific market, this exhibition provides a great venue where retail suppliers and buyers can gather in one place. Retail solutions, business opportunities, peer interaction, and all kinds of other services will be available for retailers to help them prepare for a rapidly-changing market.

K Shop 2014 is an exhibition specialized in shop technology and design. It covers everything about the retail industry by covering various categories related to shops, shop IT solutions, retail fixtures, and visual merchandising. K Shop 2014 aims to become an industry-specialized exhibition which can lead the retail industry with the newest trends, ideas, and a pool of industry experts.

Korean and Asia-Pacific retail market leaders such as decision makers from department stores, markets, franchise shops, and shopping malls will be coming to the exhibition, making it possible to contact them directly.

This exhibition is held as a joint venture between KINTEX and e-Sang Networks, Korea's top leading exhibition orga-

K Shop Fair 2013 Overview

Title	K Shop 2014
Date	September 25-27, Thursday to Saturday, 2014
Venue	Korea International Exhibition Center, or KINTEX, Hall 10
Size	300 exhibitors, 40,000 visitors
Organizers	KINTEX, e-Sang Networks
Web Site	www.kshopfair.com
Categories	Shop Design: interior, visual merchandising, expo Shop Technology: i-Retail, Retail Fixture, Security
Inquiries	call +82-31-810-8073
Deadline	June 30, 2014

nizer and also the host of Kyunghyang Housing Fair. With this fully experienced and reliable organizing team, K Shop 2014 is going to be an internationalized, specialized representative shop exhibition of Korea.





이사오면 40/0 수 1회

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"Incredible China" Tour

Valuable Exploration of Old and New of Emerging China



China Daily, the Beijing-based state-owned English newspaper, arranged an "Incredible China" Tour to explore the ancient historical relics and modern attractions of China. They invited 12 journalists and photographers from eight counties including South Korea, the Philippines, Kazakhstan, Uzbekistan, Myanmar, Pakistan, Brunei, and Nepal. BusinessKorea joined the tour representing Korea.

The tour visited three cities of China: Xi'an in Shaanxi Province, Tai-yuan in Shaanxi Province, and Zhangjiagang in Jiangsu Province. The former two cities in west and north China have rich historical relics, while the last is emerging as an economic center and international harbor in China's east. All the delegates arrived at the airport in Xi'an on May 21.

Xi'an: Starting Point for China's New Era as the Heart of Ancient Culture

The tour with the 11 days' itinerary started from Xi'an, the capital of Shaanxi Province, with guides and staff from China Daily attending as well.

Shannxi Province is the starting point of the ancient Silk Road from China, which has linked Asia and Europe for more 2,000 years. The Silk Road tour would bring you to taste the ancient inland trading cities surrounding the Taklamakan Desert and see historical relics of the encounter between East and West over one thousand years ago.

Chinese President Xi Jinping proposed to build the Silk Road Economic Belt when he visited Kazakhstan last September. His proposed idea would affect areas that total nearly three million in population in Kazakhstan, Uzbekistan, and Turkey, and would boost China's cooperation with Central Asian nations.

Xi'an, or sometims Changan, is China's ancient capital, and currently the capital of Shannxi Province. It is well-known for its Qin Dynasty Terracotta Army. Xi'an's history dates back to the Qin Dynasty (221-206 BC) and houses rich historical artifacts, attracting tourists from all over the world. Air routes between Xi'an and South Korea are open, connecting Xi'anyang International Airport to the three airports in South Korea; Seoul, Busan, and Jeju. Xi'an is located in northwest China, with a total of 9,983 square kilometers of land and 7.53 million people. The Korean IT giant Samsung Electronics started operations on a cutting-edge 3D V-NAND semiconductor factory in Xi'an in May, for which it injected a total of US\$7 billion.

The three night and four day tour program in Xi'an consisted largely of the tours to the sites that present historical relics from the Qin Dynasty to the Ming Dynasty (1368-1644 AD), including Tang Paradise Xi'an, a huge park which was full of the perfume of Qin Dynasty; Shaanxi Historical Museum with a total space of 70,000 square meters displaying 370,000 unearthed cultural relics; Xi'an City Wall constructed by Qin Shi Huang but maintaining its original shape up to now; Xi'an City Wall-Shuyuan Gate built during the Ming Dynasty (1368-1644 AD); and a Han Dynasty Museum full of the historical relics of the first emperor Han of the Han Dynasty (202 BC-220 AD).

It rained the whole second day of the journey in Xi'an when we visited the Terracotta Army Museum containing more than 8,000 warriors, 130 chariots with 520 horses, and 150 cavalry horses. Despite the uninterrupted rain, many visitors came and were moving around the amazing museum.

We also had the chance to have a glimpse at the daily lives of ancient Chinese people by visiting Chen Lu Town on the hilltop at an elevation of about 1,300 meters. The town enjoys the reputation of the "Living Fossil of the Oriental Ancient Town of Ceramics." We also visited another ceramics site, the Yaozhou Kiln Museum, listed as one of the "100 Great Archaeological Discoveries of China in the 20th century." The ceramics museum was reflecting more than 1,300 years of Chinese ceramic history from the Tang Dynasty (618-907 AD) to the Qing Dynasty (1636-1912 AD).

During our stay in Xi'an, we were served lavish food for lunches and dinners, sometimes watching wonderful shows at nice traditional Chinese restaurants such as the Tang Place Theatre, Tang Palace and De Fa Chung, with municipal officials present together.



A potter displays potteries in the Chen Lu Town called "Living Fossil of the Oriental Ancient Town of Ceramics"



Yaozhou Kiln Museum is listed as one of the "100 Great Archaeological Discoveries of China in the 20th Century."



Traditional China Dancing Shows at Tang Palace in Xian

Taiyuan: Center of Convergence of the Old and the New

On the night of the 4th day of the journey, the delegation arrived in the airport of Taiyuan, the capital of Shanxi Province, where the municipal officials of Taiyuan and China Daily's branch staff welcomed us. We were expected to stay for another three nights and four days' trip in the city.

Taiyuan is famous for its leading role in the commercialization and civilization of China from the Ming Dynasty. Shanxi Merchants had been the strongest and most dominant commercial power in China, expanding its trade routes to all the directions beyond China to South East Asia, Japan, and even Europe. Shanxi Merchants' Museum is one of the symbols representing it with historical relics throughout to Qing Dynasty. The museum has a hundredyear-old ancient style, but was constructed just four years ago.

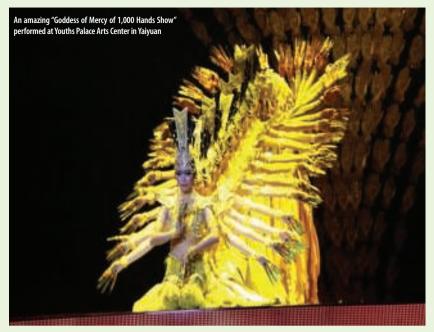
One of the distinctive tours in Taiyuan was to visit huge factories. One of them was China's famous brand, the Shanxi Shuita Vinegar Industry, that produces various alcoholic and nonalcoholic liquors with 38 production bases throughout China. We tasted some liquor there.

We also visited Taiyuan Iron and Steel Company (TISCO), which was set up in 1934, has its own electricity, rail track, gardens, town, schools, swimming pool, fitness center, and other facilities over 7.8 square kilometers of campus. The company employs 20,000 workers. TISCO has an annual production capacity of over 10 million tons of steel with its annual revenue amounting to more than 100 billion yuan. The steel company made a technology assistance agreement with Korean steel giant POSCO in 2000. Even with no operating profits, TISCO was likely to spare no money in investing for the welfare of the employees. The company seemed to also make efforts to reduce pollution by creating large gardens. Interestingly enough, the company produces "Tai Gang" mineral water, which is provided for free to the employees.

Another example of their efforts to reduce pollution was well-shown in creating parks such as Kang Pei Forest Park and Yuquan Forest Park, both of which were built on the previous garbage dumps.

The delegation also had the chance to see some religious sites including the ancient Jinci Temple with 3,000-year-old trees, the Taoism-tinted Tao Temple located on the summit of Mengshen Mountain, and another temple with a 1,500-year-old huge statue of Buddha, the second largest in all of China. To see all this, we had to travel up three mountains including the scenic Tian Longshan Mountain (called "Fangshan Mountain" in the ancient times) at an elevation of about 1,430 meters.

Here in Taiyuan, music and dancing seemed to melt into the daily lives of the citizens. We could sense their current daily lives, which are always with free and joyful dancing and performances. In particular, Yingze Park,





The dinner was hosted at the beautiful Jinyunllou Hotel in Taiyuan in honor of the delegation with the amazing Noodle Show.



The delegation looked around the TISCO equipped with its own electricity, rail track, town, schools, etc,.



The elderly persons were enjoying tai chi or qigong exercises to music at Yingze Park in Taiyuan.

which we visited early in the morning of the final day in Taiyuan, looked like a heaven for elderly citizens. The elderly persons were enjoying tai chi or qigong exercises to music, which demonstrated the healthy life culture of the Chinese. We joined them and enjoyed aerobics by copying their motions.

In addition, we experienced Chinese joy even in the traditional food market when we visited the half-kilometer-long Taiyuan Food Street, where various kinds of Chinese traditional foods were available. Some merrymakers including magicians and dancers were performing live, in between stalls loaded on both sides of the street.

During our stay in Taiyuan, many lavish lunches and dinners were served in honor of the delegation in attendance with company managers and/or officials of the municipal government, too. In particular, we cannot forget the lavish dinner at a famous Chinese restaurant, which Ms. Liu Jin Chun, who is in charge of the Taiyuan Food Street area as a municipal official, hosted. Owing to our next event, we had to leave the restaurant in a hurry. We missed enjoying much of the excellent food.

Leaving municipal officials of Taiyuan behind us at Taiyuan airport, we took a flight for Shanghai in Jiangsu Province. We thanked those who had stayed with us during the whole Taiyuan tour very much and they even came to the airport to see us off.

On the flight to Shanghai, the "Goddess of Mercy of 1,000 Hands Show,"

which had been performed at Youths Palace Arts Center in Yaiyuan, was still lingering in my eyes. The Chinese ancient history-based show was the most memorable experience to me in the tour. The other delegate members also must have left Taiyuan with the amazing and wonderful show in their memory and heart, where the delegates were served as VIP guests and guided to the stage to take pictures with the famous national artists of China.

Zhangjiagang: Emerging Economic Hub in East China

Late afternoon on that day we arrived at Shanghai Airport. On the way from Shanghai Airport to Zhangjiagang, we were hosted to dinner in a nicely-decorated hotel. The dinner was hosted by the municipal government of Zhangjiagang. Its Propaganda Minister, Ms. Yang Fang, briefed us on the fast-developing city. Then she guided us to a big dinner round table with reserved seating. It was the first time during the tour that the delegation all had dinner at a single table.

Our new destination city Zhangjiagang, which is a clean and peaceful port city with a long history and a population of 1.54 million, was located two hours' drive from Shanghai Airport. The traditional city also looked to share harmony with both the old and the new.

We started to explore the traditional cultural relics there, too. Xiangshan Hill Scenic Area, which was our first stop in the city, has numerous historical relics full of the scent of traditional cultures. We could also see elderly persons there doing exercises with various motions like Kung Fu or martial arts. Musical performances were going on, too. We also visited an ancient auditorium Story Telling House in the Eternal Spring Garden, where mostly elderly persons were occupying the seats, watching the Chinese traditional music performances of the past dynasties.

It gave me another experience in the Chinese traditional tasting to visit Fenghuang Town and Tianzhuang's Ancient Street, both of which have 1,000 years



The golden five finger statue at the entrance of Yonglian Village, representing the sweat and wealth of rich farm villagers.



Tangshi elementary school students enjoy variety of programs for welfare, including the training traditional music, calligraphy, etc.



Zhangjiagang is a beautiful and clean port city with a long history and 1.54 million population.

of history and rich culture backgrounds. Fenghuang Town has a beautiful museum that presented 7,000 years of human history and dress made from natural resources. There was also a small auditorium in Tianzhuang's Ancient Street, where a musical performance was arranged especially in our honor. There, Zhangjiagang TV interviewed me and some other delegates about our impression and experiences in the city. I said the food of Zhangjiagang was better fit for my taste, while those of Xi'an and Taiyuan, which we visited before, were a little bit salty. I added that Zhangjiagang is a modernized city that keeps a harmony with the ancient and the modern, while the former two cities looked more like ancient cities with many traditional cultural buildings remaining.

To see the other side of the city, i.e. the modernized figures of the city, we visited the well-planned Yonglian Village in Nanfeng Town, which is full of modern facilities, including a nice exhibition center and a well-equipped free daycare center for children. The village people serve there on an honorary basis. We looked around the village in an "elephant train." We dropped by another village, Jincun Village in Tangqiao Tang, which has a 1,000 years of history too, but has been also developed and transformed to a modern city.

We could also see the modernized harbor in the emerging city. As a symbol of modernization, Zhangjiagang Port was boasting of its 63.6 km-long coastline with 127 berths, including ones for large vessels. The port was constructed in 1968 on the Yangtze River, dividing China into North and South China as the 2nd longest river in the world. The

delegation enjoyed boarding a boat for around a one hour tour.

In particular, I cannot but mention the visit to Tangshi primary school with over 2,500 students in Zhangjiagang. Most of them are sons and daughters of immigrated rural exodus workers from other regions. The primary school arranges and operates a variety of programs for student welfare, including the training and education of musical instrument playing, calligraphy, and traditional music. It was really impressive to me when I heard that the school Principal serves on an honorary basis.

We also visited bazaars as well as modern shopping centers downtown, such as a 20-storeyed Zhangjiagang Shopping Park and Pedestrian Street, where we enjoyed shooting the panoramic view of the modern city and shopping. The Street was built on both sides of a canal on the Yangtze River, adding to the beauty of the city.

It was also helpful for me to catch a glimpse at the current lifestyle of citizens to visit Jinag Lake Eco Park, which is built beside a big lake. Some couples in wedding attire were seen there. They come here for wedding photos before marriage. Our visit to the Municipal Culture Center also gave us the chance to see the city government's efforts to upgrade the quality of life of its citizens. The center was constructed with a total of 700 million yuan and is equipped with various life facilities including an exhibition hall, a library, and a theatre.

Our 11-day journey through wonderful China organized by China Daily was coming to an end. In the last evening of the tour, we shared the photographs we had taken.

Epilogue

Even if the tour made us stressed and tired sometimes with its tight schedule, I am sure that the delegates all enjoyed the historical sites and relics of China, delicious and lavish Chinese food, and the warm hospitality shown by the Chinese people throughout the tour whilst experiencing the ancient and modern, the old and new, and East and West all together in the great wonderful land of China. They were also sure to feel the emerging power of the country.

In particular, it was quite impressive that the old cultural roots are now providing a joyful and peaceful base for the daily life of citizens, especially elderly persons, as shown in exercising their body and mind in the parks. In addition, the citizens' voluntary services and participation for the community was telling how China's welfare is and will be going on in the future.

Now, I should be ready to return to normal work and life in my country. I would like to extend my thanks to all the tour personnel who showed such warm kindness and friendship throughout the tour, including those from the China Daily and the municipal governments. In particular, I cannot forget the China Daily staff's constant assistance and care for me, who suffered from maladjustment to Chinese food. I also wish all good luck and happiness to the delegation members.

Written by Choi Mun-hee, Culture Editor of BusinessKorea

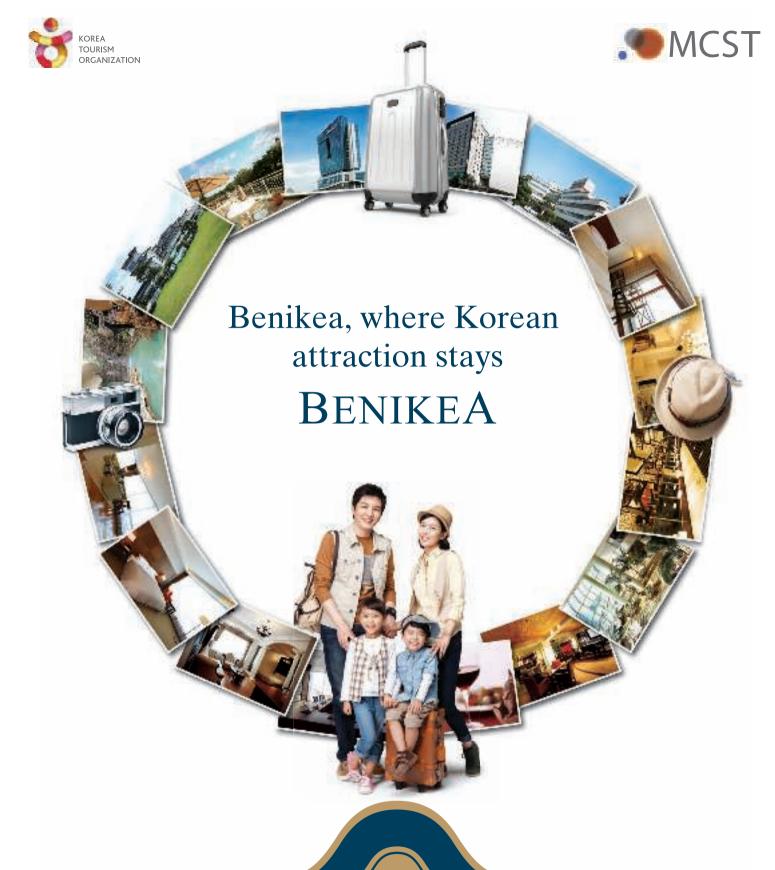


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